

University of the Pacific Law Review

Volume 51 | Issue 2

Article 9

1-1-2020

Hey Siri, What is California Doing to Prepare for the Growth of Artificial Intelligence

Joshua La Bella

Follow this and additional works at: https://scholarlycommons.pacific.edu/uoplawreview

Part of the Law Commons

Recommended Citation

Joshua La Bella, *Hey Siri, What is California Doing to Prepare for the Growth of Artificial Intelligence*, 51 U. PAC. L. REV. 317 (2020). Available at: https://scholarlycommons.pacific.edu/uoplawreview/vol51/iss2/9

This Legislative Review is brought to you for free and open access by the Journals and Law Reviews at Scholarly Commons. It has been accepted for inclusion in University of the Pacific Law Review by an authorized editor of Scholarly Commons. For more information, please contact mgibney@pacific.edu.

Government

Hey Siri, What is California Doing to Prepare for the Growth of Artificial Intelligence?

Joshua La Bella*

Code Section Affected Government Code § 11546.11 (new). AB 594 (Salas); vetoed.

TABLE OF CONTENTS

I. INTRODUCTION	316
II. LEGAL BACKGROUND	317
A. Establishing Termination Protections in a Civil Servant's	
Employment	318
1. Creating a Property Right in a Civil Servant's Employment	318
2. Expanding Civil Servant's Due Process Protections	320
B. Civil Servants' Layoff Protections	321
1. California Government Code Section 19997	321
2. SEIU 1000's Collective Bargaining Agreement	322
III. AB 594	323
IV. ANALYSIS	323
A. Concerns Associated with AI Displacing Jobs	324
B. California's Options to Dismiss Civil Servants	325
1. Difficulties in Terminating Civil Servants	325
2. California's Ability to Layoff Civil Servants	326
C. California's Obligation to Find Displaced Civil Servants New	
Jobs	328

^{*} J.D. Candidate, University of the Pacific, McGeorge School of Law, to be conferred May 2021; B.A., Political Science with a History minor, University of California, Los Angeles, 2018. First, I would like to thank my friends for their support throughout the Greensheets process. I also want to thank the Law Review staff and editors for their generous assistance and guidance with this article. Finally, I would like to thank my family for their unconditional love and encouragement throughout my academic career.

I. INTRODUCTION

Artificial intelligence ("AI") directly caused Bernadette Callahan to lose her dream job.¹ At thirty-one years old, Bernadette transitioned her career from a freelance writer to an online content marketer.² For seven years, her new career provided a manageable work-life balance, steady income, and creative outlet.³ Bernadette assumed she would be immune to AI's invasion into online content marketing since she was a tenured marketer with a wealth of experience.⁴ However, a new tool for online content marketers turned Bernadette's life upside down—a single website replaced her entire marketing team.⁵

A new phenomenon known as Big Data fosters AI's ability to develop and expand.⁶ Big Data refers to the unprecedented volume, velocity, and variety of data available for analysis.⁷ The enormous amount of information available motivates researchers to create algorithms, which input immense amounts of information and output patterns, predictions, and correlations.⁸ By analyzing the algorithm results, researchers are able to invent helpful tools ranging from smartphone applications, like Google Maps, or Tesla's autonomous vehicles.⁹

AI's broad reach seeps into many different fields, allowing the advantages to shine in a diverse range of environments.¹⁰ For example, farmers capitalize on AI's predictive models and shift crop rotations based on AI detecting pests, diseases, soil conditions, crop health, and sustainability.¹¹ Education systems

^{1.} Bernadette Callahan, *I Lost My Job Because I Was Replaced by a Robot*, MEDIUM (Dec. 23, 2017), https://medium.com/@berna79/how-i-lost-my-job-because-of-artificial-intelligence-720767a3ffce (on file with *The University of the Pacific Law Review*).

^{2.} *Id*.

^{3.} *Id.*

^{4.} *Id.*

^{5.} Id.

^{6.} Big Data, What It Is and Why It Matters, SAS, https://www.sas.com/en_us/insights/big-data/what-isbig-data.html (last visited June 19, 2019) (on file with *The University of the Pacific Law Review*).

^{7.} Id.

^{8.} See Peter Stone ET AL., Artificial Intelligence and Life in 2030, ONE HUNDRED YEAR STUDY ON ARTIFICIAL INTELLIGENCE (Sept. 2016), https://ai100.stanford.edu/sites/g/files/sbiybj9861/f/ai100report10032016fnl_singles.pdf (on file with The University of the Pacific Law Review).

^{9.} Rachit Agarwal, 10 Examples of Artificial Intelligence You're Using in Daily Life, BEEBOM (Sept. 21, 2018, 6:18 PM), https://beebom.com/examples-of-artificial-intelligence/ (on file with The University of the Pacific Law Review).

^{10.} Pedro Nava, et al., *Artificial Intelligence: A Roadmap for California*, LITTLE HOOVER COMMISSION (Nov. 2018), https://lhc.ca.gov/sites/lhc.ca.gov/files/Reports/245/Report245.pdf (on file with *The University of the Pacific Law Review*).

^{11.} Kumba Sennaar, *AI in Agriculture—Present Applications and Impact*, EMERJ (May 30, 2019), https://emerj.com/ai-sector-overviews/ai-agriculture-present-applications-impact/ (on file with *The University of the Pacific Law Review*).

utilize AI in the classroom by tailoring learning modules to meet individual student needs and assisting teachers with curriculum analytics, tutoring, and grading.¹² Governments use AI to increase productivity and decrease taxpayer spending by eliminating clerical work and significantly reducing document retrieval time.¹³ AI has even beat world champion board game players in games such as Chess and Go.¹⁴

Experts predict about forty percent of jobs may face the same fate as Bernadette's, forcing California to prepare for a pending economic shift.¹⁵ AB 594 could have helped California prepare for the economic shift by allowing a new advisory position ("AP") within the California Department of Technology ("CDT"), which oversees AI's implementation.¹⁶ However, AI still has the potential to displace thousands of civil servants who, unlike Bernadette, retain a property right in their job.¹⁷ Without proper dismissal procedures, California could infringe on employees' Fifth and Fourteenth Amendment due process protections.¹⁸ California, in consultation with the CDT, must develop a solution that reeducates and retrains displaced civil servants for their subsequent reentry into state civil service.¹⁹

II. LEGAL BACKGROUND

With AI's implementation causing concern for job security, California's civil

15. Don Reisinger, *A.I. Expert Says Automation Could Replace 40% of Jobs in 15 Years*, FORTUNE (Jan. 10, 2019), https://fortune.com/2019/01/10/automation-replace-jobs/ (on file with *The University of the Pacific Law Review*).

16. AB 594, 2019 Leg., 2019–2020 Sess. (Cal. 2019) (as amended Aug. 30, 2019, but not enacted); SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*).

17. SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*); see CAMBRIDGE DICTIONARY, https://dictionary.cambridge.org/us/dictionary/english/civil-servant (last visited Aug. 4, 2019) (on file with *The University of the Pacific Law Review*) (defining civil servant as an individual who works for local, state, or federal government).

18. See infra Section II.A.

19. CAL. GOVT. CODE § 19997 (West 2019); AB 594, 2019 Leg., 2019–2020 Sess. (Cal. 2019) (as amended Aug. 30, 2019, but not enacted); SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*).

^{12.} See Alec Sears, *The Role of Artificial Intelligence in the Classroom*, ELEARNING INDUSTRY (Apr. 14, 2018), https://elearningindustry.com/artificial-intelligence-in-the-classroom-role (on file with *The University of the Pacific Law Review*).

^{13.} Peter Viechnicki & William D. Eggers, *How Much Time and Money Can AI Save Government?*, DELOITTE INSIGHTS (Apr. 26, 2017), https://www2.deloitte.com/insights/us/en/focus/cognitive-technologies/artificial-intelligence-government-analysis.html (on file with *The University of the Pacific Law Review*).

^{14.} Deep Blue, IBM, https://www.ibm.com/ibm/history/ibm100/us/en/icons/deepblue/ (last visited June 15, 2019) (on file with The University of the Pacific Law Review); Paul Mozur, Google's AlphaGo Defeats Master in Win (May 23, Chinese Go for A.I., N.Y. TIMES 2017). https://www.nytimes.com/2017/05/23/business/google-deepmind-alphago-go-champion-defeat.html (on file with The University of the Pacific Law Review).

2020 / California's Preparation for the Growth of Artificial Intelligence

servants have powerful resources to rely on.²⁰ Upon achieving permanent employee status, California civil servants obtain a property right in their job.²¹ The Fifth and Fourteenth Amendment's due process requirements bolster this property right, which leads to greater job security.²² In the event of a civil servant layoff, the Service Employees International Union, Local 1000 ("SEIU 1000") contract requires the union to begin collective bargaining with the state.²³ The due process protections and union-backed collective bargaining ensure some job security for civil servants.²⁴ Section A explores termination protections available to permanent civil servants.²⁵ Section B examines the California Government Code relevant to government layoffs and the layoff procedures in SEIU 1000's collective bargaining agreement.²⁶

A. Establishing Termination Protections in a Civil Servant's Employment

Property rights—through numerous precedential decisions—evolved and expanded beyond real property, money, and chattels.²⁷ For example, civil servants retain a protected property interest in their jobs through legitimate claims of entitlement to the interest.²⁸ Further, the property right in a civil servant's job secures additional due process protections to that civil servant.²⁹ Subsection 1 explains how a property right in a civil servant's job came into existence.³⁰ Subsection 2 describes expanding due process protections for a civil servant's property right to employment.³¹

1. Creating a Property Right in a Civil Servant's Employment

The Supreme Court contemplated expanding property rights in *Board of*

^{20.} See Bd. of Regents of State Colls. v. Roth, 408 U.S. 564 (1972); see also Skelly v. State Pers. Bd., 15 Cal. 3d 194, 197 (Cal. 1975).

^{21.} See CAL. GOVT. CODE § 18528 (West 2019) (defining a permanent employee as "an employee who is lawfully retained in his or her position after the successful completion of the probationary period."); see also infra Section II.A.

^{22.} See U.S. CONST. amends V, XIV (guaranteeing due process rights).

^{23.} MASTER AGREEMENT EFFECTIVE JULY 2, 2016 THROUGH JANUARY 1, 2020, SEIU LOCAL 1000, available at https://www.seiu1000.org/sites/main/files/fileattachments/seiu_master_agreement_2017_final1.pdf (last visited July 10, 2019) [hereinafter SEIU LOCAL 1000] (on file with *The University of the Pacific Law Review*).

^{24.} See U.S. CONST. amends V, XIV; SEIU LOCAL 1000, supra note 23.

^{25.} See infra Section II.A.

^{26.} See infra Section II.B.

^{27.} Bd. of Regents of State Colls. v. Roth, 408 U.S. 564, 576 (1972); Roybal v. Toppenish Sch. Dist., 871 F.3d 927, 931 (9th Cir. 2017).

^{28.} Bd. of Regents of State Colls. 408 U.S. at 576.

^{29.} Skelly v. State Pers. Bd., 15 Cal. 3d 194, 206 (Cal. 1975).

^{30.} See infra Section II.A.1.

^{31.} See infra Section II.A.2.

*Regents of State Colleges v. Roth.*³² There, Wisconsin State University-Oshkosh hired Roth, the respondent, to teach for one academic year.³³ At the conclusion of the academic year, the state university—without explanation—decided not to rehire the respondent.³⁴ Subsequently, the respondent sued the Board of Regents of State Colleges, alleging a deprivation of procedural due process because the state university's decision lacked an explanation.³⁵

Although the Court ultimately found the university did not violate the respondent's Fourteenth Amendment right, it established a property right in his contracted job.³⁶ The Court reasoned that to have a property interest in a benefit, there must be more than a unilateral expectation or abstract desire for it.³⁷ Rather, there must be a "legitimate claim of entitlement to" the interest.³⁸ The Court analogized the respondent's property interest in welfare recipients.³⁹ Although the respondent undeniably had a property interest in his job during the contracted time, the Court found this property right ended when the contract expired.⁴⁰

Courts continually uphold *Roth*'s precedential decision to establish a property right in a civil servant's employment.⁴¹ In 2017, the Ninth Circuit heard *Roybal v. Toppenish School District* and applied *Roth*'s principle.⁴² Alleging a deprivation of due process, Roybal—a hired principal—sued the Toppenish School District after receiving a demotion and lowered salary.⁴³ Finding in favor of Roybal, the court reasoned that a Washington statute forbade transferring a principal with three or more years of experience to a position with lower pay.⁴⁴ Citing *Roth*, the Ninth Circuit recognized Roybal retained a protected property interest in his salary as a principal that the school district could not deprive without due process.⁴⁵ The statute in *Roybal*, similar to the contract in *Roth*, established a property right in the respective employee's jobs—ensuring due process protections.⁴⁶

41. Roybal v. Toppenish Sch. Dist., 871 F.3d 927, 931 (9th Cir. 2017).

^{32.} Bd. of Regents of State Colls. v. Roth, 408 U.S. 564 (1972).

^{33.} Id. at 567.

^{34.} Id. at 568.

^{35.} Id.

^{36.} Id. at 578.

^{37.} Id. at 577.

^{38.} Id.

^{39.} Id. at 578.

^{40.} *Id*.

^{42.} Id. at 929.

^{43.} *Id.* at 931.

^{44.} Id. at 932.

^{45.} *Id*.

^{46.} Bd. of Regents of State Colls. v. Roth, 408 U.S. 564, 578 (1972); Roybal 871 F.3d at 931.

2. Expanding Civil Servant's Due Process Protections

In *Skelly v. State Personnel Board*, the California judiciary further defined the necessary parameters surrounding due process rights when the state takes disciplinary action against an employee.⁴⁷ Petitioner, John Skelly, worked for the State Department of Health Care Services ("Department") as a medical consultant.⁴⁸ After working for the Department for seven years and achieving permanent employee status, the Department terminated the petitioner, citing three distinct causes from California's Government Code.⁴⁹ The petitioner sued, claiming the Department abused its discretion in the termination and excessively punished petitioner.⁵⁰

The California Supreme Court overturned the petitioner's termination, stating the Department abused its discretion when it terminated the petitioner because his lunch did not adversely affect public service.⁵¹ In addition, the court realized employees lacked fundamental constitutional demands under previous California statutory requirements.⁵² After declaring the Department violated the petitioner's Fifth and Fourteenth Amendment due process rights, the court mandated stricter requirements when filing disciplinary actions against permanent employees.⁵³ Establishing new safeguards, the court required "notice of the proposed action, the reasons therefor, [and] a copy of the charges and materials upon which the action is based."⁵⁴ Moreover, the employee must have the opportunity "to respond, either orally or in writing, to the authority initially imposing discipline"—thus, the court coined the term "Skelly hearing."⁵⁵

Although *Skelly*'s expansion of due process procedures still protects civil servants today, California courts are skeptical about over-broadening the due process requirements.⁵⁶ In *Ferguson v. City of Cathedral City*, the court declined to impose a mandatory second *Skelly* hearing, reasoning that the employee "rejected all the proposed alternatives and refused to participate."⁵⁷ Moreover, in

55. Id.

56. See Ferguson v. City of Cathedral City, 197 Cal. App. 4th 1161, 1164 (Cal. Ct. App. 2011); see also Gilbert v. City of Sunnyvale, 130 Cal. App. 4th 1264, 1270 (Cal. Ct. App. 2005).

57. See Ferguson 197 Cal. App. 4th at 1164 (highlighting that the city attempted multiple times to

^{47.} Skelly v. State Pers. Bd., 15 Cal. 3d 194, 197 (Cal. 1975).

^{48.} Id.

^{49.} See *id.* (elaborating that the petitioner's causes for termination were: intemperance, inexcusable absence without leave, and other failure of good behavior during duty hours which caused discredit to the Department).

^{50.} Id. at 201.

^{51.} Id. at 2180.

^{52.} Id. at 215.

^{53.} See Arnett v. Kennedy, 416 U.S. 134, 135 (1974) (confirming that "post-termination hearing procedures adequately protect the liberty interest of federal employees . . . in not being wrongfully stigmatized by untrue and unsupported administrative charges"); see also Skelly 15 Cal. 3d at 215 (explaining that the court in Skelly found California statutes needed to provide more prior procedural rights to civil servants considering recent Supreme Court Cases).

^{54.} Skelly 15 Cal. 3d at 215.

Gilbert v. City of Sunnyvale, the court refused to interpret "required materials" to mean "each and every document identified in the Chief's Case."⁵⁸ Despite this hesitation, the interconnection between *Roth*'s established property right and *Skelly*'s heighted due process protections still ensures that California civil servants have adequate protections against terminations.⁵⁹

B. Civil Servants' Layoff Protections

Similar to terminations, civil servants retain certain protections against stateconducted layoffs.⁶⁰ First, civil servants can rely on California's Government Code for protections against layoffs.⁶¹ Additionally, civil servants can depend on unions to engage in collective bargaining with the state when layoffs are pending—negotiating for less adverse terms.⁶² Subsection 1 discusses the California Government Code granting protections against layoffs to civil servants.⁶³ Subsection 2 explains the current SEIU 1000 collective bargaining agreement.⁶⁴

1. California Government Code Section 19997

For permanent civil servants who retain a property right in their job, California's Government Code specifies the state's mandatory procedures when conducting such layoffs.⁶⁵ Initially, state layoffs occur in relation to an employee's seniority points.⁶⁶ Tenured civil servants experience increased job security because employees receive one seniority point for each full month they work in state service.⁶⁷ This results in dismissing the newest civil servants first because they have the least seniority points.⁶⁸ Alternatively, in lieu of a layoff, an

schedule Ferguson's requested Skelly hearing, but Ferguson rejected all their proposals).

^{58.} See Gilbert130 Cal. App. 4th at 1280 (explaining that the court only required the City to give documents before a pre-termination hearing that are sufficient to enable appellant to adequately respond at the pre-termination stage).

^{59.} Bd. of Regents of State Colls. v. Roth, 408 U.S. 564, 578 (1972); Skelly 15 Cal. 3d at 215.

^{60.} CAL. GOVT. CODE § 19997 (West 2019); SEIU LOCAL 1000, supra note 23.

^{61.} CAL. GOVT. CODE § 19997 (West 2019).

^{62.} See Certified Co. v. Hawaii Teamsters and Allied Workers, Local 996, IBT, 597 F.2d 1269, 1271 (1979) (explaining that generally parties can orally modify a collective bargaining agreement); see also Roberts v. W. Pac. R.R. Co., 142 Cal. App. 2d 317, 321 (Cal. Ct. App. 1956) (noting that union's and employer's ability to modify collective bargaining agreements is well settled law); see also CAL. CIV. PRAC. EMPLOYMENT LITIGATION § 8.26 (expressing that parties can modify a collective bargaining agreement, "and the modifications are binding on the employer, the employees, and the unions.").

^{63.} See infra Section II.B.1.

^{64.} See SEIU LOCAL 1000, supra note 23 (observing 96,000 civil servants belong to SEIU Local 1000, making it the largest public sector union); see also infra Section II.B.2.

^{65.} CAL. GOVT. CODE § 19997 (West 2019).

^{66.} CAL. GOVT. CODE § 19997.3 (WEST 2019).

^{67.} Id.

^{68.} Id.

2020 / California's Preparation for the Growth of Artificial Intelligence

employee may take a demotion to any job class with the same or lesser salary.⁶⁹ After layoffs occur, the state creates a reemployment list that includes the recently-laid off civil servants.⁷⁰ California has the duty to find the employees on the reemployment list a job within civil service.⁷¹

2. SEIU 1000's Collective Bargaining Agreement

SEIU 1000 is the relevant union for civil servants in the following bargaining units: administrative, financial, staff services, printing trades, educational consultants, and librarians.⁷² SEIU 1000's contract adheres to California's Government Code regarding the policies and procedures of layoffs.⁷³ The union, however, follows additional guidelines when engaging in collective bargaining with respect to layoffs.⁷⁴ SEIU 1000's contract requires the union to meet with the state to reduce the adverse effects of layoffs and explore potential alternatives.⁷⁵ Possible alternatives to layoffs include "voluntary reduced work time, retraining, early retirement, and unpaid leaves of absence."⁷⁶ Courts have found unions cannot negotiate whether a layoff happens, as that is ultimately the state's decision.⁷⁷ Rather, unions only have the authority to negotiate the number of employees laid off and the timing of such layoffs.⁷⁸

Implementing AI into California's government may displace civil servants.⁷⁹ However, civil servants enjoy established protections under *Roth* and *Skelly* that ensure job security and due process rights.⁸⁰ Additionally, collective bargaining by unions—alongside statutory seniority points and reemployment lists—ensure California civil servants enjoy security against state-conducted layoffs.⁸¹ Finally, if layoffs do occur, AB 594's AP could have helped the state transition the

78. Id.

79. SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*).

^{69.} See CAL. GOVT. CODE § 19818.6 (West 2019) (characterizing job classes as being sufficiently similar in duties; responsibilities; title; requirements in education, knowledge, and ability; tests of fitness; and schedule of compensation).

^{70.} CAL. GOVT. CODE § 19997.2 (West 2019).

^{71.} Id.

^{72.} SEIU LOCAL 1000, supra note 23.

^{73.} Id.

^{74.} Id.

^{75.} Id.

^{76.} Id.

^{77.} Int'l Ass'n of Fire Fighters, Local 188, AFL-CIO v. PERB, 51 Cal. 4th 259, 271 (Cal. 2011).

^{80.} See Bd. of Regents of State Colls. v. Roth, 408 U.S. 564, 578 (1972); Skelly v. State Pers. Bd. 15 Cal. 3d 194, 215 (Cal. 1975).

^{81.} CAL. GOVT. CODE § 19997 (West 2019); MASTER AGREEMENT EFFECTIVE JULY 2, 2016 THROUGH JANUARY 1, 2020, SEIU LOCAL 1000, *available at* https://www.seiu1000.org/sites/main/files/file-attachments/seiu_master_agreement_2017_final1.pdf (last visited July 10, 2019) (on file with *The University of the Pacific Law Review*).

displaced civil servants back into civil service.82

III. AB 594

Assembly Member Rudy Salas introduced AB 594 to ensure California prepares for AI's potential displacement of civil servants.⁸³ AB 594 would have allowed the CDT's Director to appoint an AP within the CDT to facilitate AI's implementation into state government.⁸⁴ The AP is responsible for advising the CDT on implementing AI to facilitate the CDT's "strategic plans, policies, standards, and enterprise architecture."⁸⁵

Additionally, AB 594 would have required the CDT to adopt guidelines that the Future of Work Commission drafted, which govern AI's implementation and use in state government.⁸⁶ Particularly, the guidelines include standards for four areas: ethically using AI, increasing efficiency for projects, incorporating new technologies, and benefitting workers with AI.⁸⁷ Prior to the enactment of AB 594, the law provided no overall plan or framework dictating how California should prepare for AI's potential economic impact on civil servants.⁸⁸ AB 594, along with the newly appointed AP, would have established a plan to guide California through this new employment frontier.⁸⁹

IV. ANALYSIS

AI's ability to displace human labor is comparable to other major technological unemployment periods, such as the Industrial Revolution.⁹⁰ Resembling machines like the mechanized loom that increased unemployment, AI may initially slice the labor force because it can complete menial tasks at a fraction of the cost.⁹¹ California can prepare for AI's potential displacement of

87. Id.

^{82.} See generally AB 594, 2019 Leg., 2019–2020 Sess. (Cal. 2019) (as amended Aug. 30, 2019, but not enacted).

^{83.} SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*).

^{84.} AB 594, 2019 Leg., 2019–2020 Sess. (Cal. 2019) (as amended Aug. 30, 2019, but not enacted).

^{85.} Id.

^{86.} Id.

^{88.} SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*).

^{90.} See generally Tejvan Pettinger, *Technological Unemployment*, ECONOMICS HELP (Sept. 24, 2017), https://www.economicshelp.org/blog/glossary/technological-unemployment/ (on file with *The University of the Pacific Law Review*) (defining that technological unemployment "occurs when developments in technology and working practices cause some workers to lose their jobs").

^{91.} *The Power Loom*, HIST. MESH, http://historymesh.com/object/power-loom/?story=textiles (last visited Aug. 5, 2019) (on file with *The University of the Pacific Law Review*); see also Peter Viechnicki & William D. Eggers, *supra* note 13 (showing that AI based technology has the potential to save "millions of staff hours and billions of dollars annually").

workers and alleviate some of the growing pains associated with civil servant displacement by enacting laws like AB 594.⁹² However, if AI replaces civil servants, many employment issues could arise.⁹³ Section A considers the concerns about AI's displacement of workers and its effect on the average family.⁹⁴ Section B reviews the legality of replacing civil servants with AI.⁹⁵ Section C provides an overview of California's obligation to find laid off civil servants new jobs within civil service.⁹⁶

A. Concerns Associated with AI Displacing Jobs

With the unknowns of technological advances, science fiction movies and television shows often portray AI in a way that instills fear in viewers.⁹⁷ Shows, like Black Mirror, warped public perception of AI with interpretations ranging from tortured, sentient video game characters to AI physically and mentally imitating deceased loved ones.⁹⁸ Instead of such mischaracterized representations, AI is actually computer programs that input or output data based on algorithms.⁹⁹

Studies show ten percent of federal and state person hours consist of documenting and recording information—activities replaceable by AI.¹⁰⁰ For replaceable civil servants, AB 594 facilitating AI's implementation into state service could spell disaster.¹⁰¹ California, in close consultation with the AP, needs to implement a framework that adequately prepares for the potential displacement of thousands of civil servants.¹⁰²

- 94. See infra Section IV.A.
- 95. See infra Section IV.B.
- 96. See infra Section IV.C.

99. Rachit Agarwal, supra note 9.

100. See Peter Viechnicki, supra note 13 (demonstrating that jobs with a high likelihood of replacement deal with data input).

101. SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*).

^{92.} AB 594, 2019 Leg., 2019–2020 Sess. (Cal. 2019) (as amended Aug. 30, 2019, but not enacted).

^{93.} SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*).

^{97.} Genevieve Valentine, 'Black Mirror' Has a Bleak View of Technology, Humanity, and Its Audience, VICE (Oct. 25, 2016, 10:40 AM), https://www.vice.com/en_us/article/4w5a8w/black-mirror-has-a-bleak-view-of-technology-humanity-and-its-audience (on file with The University of the Pacific Law Review).

^{98.} Rotten Tomatoes, https://www.rottentomatoes.com/tv/black_mirror/s02/e01 (last visited June 20, 2019) (on file with *The University of the Pacific Law Review*); Angelica Jade Bastien, *Let's Talk About the Ending of Black Mirror's 'USS Callister,' VULTURE (Jan. 8, 2018), https://www.vulture.com/2018/01/black-mirror-season-4-episode-1-ending-explained.html (on file with <i>The University of the Pacific Law Review*).

B. California's Options to Dismiss Civil Servants

AI's implementation into state government may displace civil servants.¹⁰³ The state has two options when deciding to replace human labor with AI: terminations and layoffs.¹⁰⁴ Subsection 1 highlights the difficulties in terminating civil servants.¹⁰⁵ Subsection 2 focuses on the legality surrounding California's ability to layoff civil servants.¹⁰⁶

1. Difficulties in Terminating Civil Servants

Although California is an at-will employment state, that is not the case for permanent civil servants.¹⁰⁷ Through independent and union contracts, much like the contract in *Roth*, civil servants retain a property right in their job.¹⁰⁸ The independent source (e.g., state laws, contracts, and statutes) is what separates a civil servant from the remainder of at-will employees throughout California.¹⁰⁹ This separation grants permanent employees certain protections to shield themselves from unwarranted terminations.¹¹⁰

The disciplinary process begins when a California administrative agency issues an adverse action on a civil servant for a specific, statutorily listed cause.¹¹¹ This list, totaling twenty-four different reasons, contains causes ranging from misuse of state property to dishonesty.¹¹² In addition to citing one of the twenty-four from the property right in their job.¹¹³ An administrative agency, in order to comply with this right, must put the employee on notice of the nature of the adverse action.¹¹⁴ This notice must contain the effective date, reasons for the

106. See infra Sction IV.B.2.

^{103.} Id.

^{104.} CAL. GOVT. CODE § 19572 (West 2019); CAL. GOVT. CODE § 19997 (West 2019); see Duncan v. Dep't of Pers. Admin., 77 Cal. App. 4th 1166, 1181 (2000) (distinguishing that a "termination for cause carries with it a stigmatization which might impair a person's ability to secure future employment," whereas a lay off does not).

^{105.} See infra Section IV.B.1.

^{107.} See CAL. LABOR. CODE § 2922 (defining at-will employment as employment without a specified term that is terminable "at the will of either party on notice to the other"); see also Elletta Callahan, *The Public Policy Exception to the Employment At Will Rule Comes of Age: A Proposed Framework for Analysis*, 29 AM. BUS. L.J. 481, 483 (1991) (clarifying that at-will employment is "terminable by either party, at any time, for any reason").

^{108.} See supra Section II.A.

^{109.} Bd. of Regents of State Colls. v. Roth, 408 U.S. 564, 578 (1972).

^{110.} Id.

^{111.} See CAL. GOVT. CODE § 19572 (West 2019) (defining adverse action as a "dismissal, demotion, suspension, or other disciplinary action"); see also Ray v. Henderson, 217 F.3d 1234, 241 (2000) (providing examples of other disciplinary actions such as pay cuts, "transfers of job duties, and underserved performance ratings").

^{112.} CAL. GOVT. CODE § 19572 (West 2019).

^{113.} See supra Section II.A.

^{114.} CAL. GOVT. CODE § 19574 (West 2019).

2020 / California's Preparation for the Growth of Artificial Intelligence

action, advisement of responding rights, and the appeal deadline.¹¹⁵ Finally, an administrative agency must file the notice with the State Personnel Board ("SPB") within fifteen days after the effective date of the adverse action.¹¹⁶ These requirements ensure civil servants receive their Fifth and Fourteenth Amendment due process rights.¹¹⁷

If an administrative agency further pursues the adverse action, the employee in question may argue the case in front of the SPB with a chosen union representative.¹¹⁸ Courts do not disturb an administrative agency's penalty unless "there has been an abuse of its discretion."¹¹⁹ Although an administrative agency has broad discretion, its power is not absolute; administrative agencies must act with judicial discretion.¹²⁰ Courts balance three factors to determine if the adverse action is appropriate: "harm to the public service . . . the circumstances surrounding the misconduct, and the likelihood of reoccurrence."¹²¹ Considering these factors, an administrative judge has a limit to his or her discretion.¹²² However, if a civil servant is unhappy with the SPB ruling, he or she may appeal the case to a trial court.¹²³ If the trial court overrules an SPB decision, the civil servant qualifies for restoration of back pay and lost benefits from the initial date of the adverse action.¹²⁴

The multi-layer protections afforded to civil servants guarantees due process protections against a potentially unfair termination.¹²⁵ It would be nearly impossible to circumvent each of these safeguards to terminate a civil servant.¹²⁶ If California wishes to replace civil servants with AI, it will need to pursue layoffs as an alternative option.¹²⁷

2. California's Ability to Layoff Civil Servants

Generally, states conduct layoffs for different reasons than terminations.¹²⁸ For example, California can conduct layoffs "because of lack of work or funds,

117. Skelly v. State Pers. Bd., 15 Cal. 3d. 194, 215 (Cal. 1975).

^{115.} *Id*.

^{116.} Id.; see generally Welcome to the State Personnel Board, CA.GOV, http://www.spb.ca.gov/ (last visited Aug. 6, 2019) (on file with *The University of the Pacific Law Review*) (explaining that the State Personnel Board "investigates and adjudicates alleged violations of civil service law").

^{118.} Id. at 204.

^{119.} Id. at 217.

^{120.} Id. at 218.

^{121.} Id. at 218.

^{122.} Id.

^{123.} Id. at 204.

^{124.} Id. at 205.

^{125.} Id. at 215.

^{126.} See id.

^{127.} CAL. GOVT. CODE § 19997 (West 2019).

or whenever it is advisable in the interests of the economy."¹²⁹ AB 594 implementing AI into state government would have created economic interests because the displacement of civil servants affects labor costs.¹³⁰ However, California's seniority point system provides some fairness to the layoff process.¹³¹ Furthermore, SEIU 1000's contract requires the union to engage in collective bargaining in "good faith" with the state.¹³² Therefore, to legally layoff civil servants, California must follow guidelines outlined in the statutory code and the SEIU 1000 union contract.¹³³

However, California's broad authority to layoff civil servants disappears if the state contracts out civil servants' work to AI from private firms.¹³⁴ California's Government Code stipulates eleven required conditions if a state agency wishes to contract its work to a private company.¹³⁵ One condition that may prohibit an agency from contracting out civil servants' work is that the new contract must not displace civil servants.¹³⁶ The inability to displace civil servants likely precludes contracting out AI to private firms because AI's implementation has the potential to displace many civil servants.¹³⁷ Instead, the CDT must arrange with a public agency to develop AI suitable for implementation into California's government.¹³⁸

The SEIU 1000 contract reinforces the protections against contracting out civil servants' work.¹³⁹ SEIU 1000's contract shields its members against displacement by requiring a replacement of existing personnel service contracts with bargaining unit employees if layoffs are imminent.¹⁴⁰ In sum, California's additional requirements when contracting out civil servants' work adds another level of protection for permanent employees who face possible displacement from AI.¹⁴¹ For California to layoff civil servants and comply with statutory and union requirements, a public entity must develop and implement AI into the state

^{129.} Id.

^{130.} See Ming Chin et al., CALIFORNIA PRACTICE GUIDE: EMPLOYMENT LITIGATION 6:43 (Nov. 2018 ed.) (highlighting that layoffs "for economic reasons—i.e., driven primarily by *labor cost considerations*—is a matter 'peculiarly suitable for resolution within the collective bargaining framework'").

^{131.} See supra Section II.B.2.

^{132.} See Int'l Ass'n of Fire Fighters, Local 188, AFL-CIO v. PERB, 51 Cal. 4th 259, 271 (Cal. 2011) (defining that good-faith requires that the parties attempt to reach a mutual agreement, although reaching a conclusion is not mandatory); SEIU LOCAL 1000, *supra* note 23.

^{133.} CAL. GOVT. CODE 13 § 19130; SEIU LOCAL 1000, *supra* note 23.

^{134.} CAL. GOVT. CODE § 19130 (West 2019).

^{135.} Id.

^{136.} See *id.* (defining displacement as a "layoff, demotion, involuntary transfer to a new class, involuntary transfer to a new location requiring a change of residence, and time base reductions").

^{137.} SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*).

^{138.} Id.

^{139.} SEIU LOCAL 1000, supra note 23.

^{140.} Id.

^{141.} CAL. GOVT. CODE § 19130 (West 2019); SEIU LOCAL 1000, supra note 23.

government.142

C. California's Obligation to Find Displaced Civil Servants New Jobs

After layoffs occur, California places employees onto a reemployment list to facilitate their reentry into state civil service.¹⁴³ Seniority points determine the overall position an individual will be on the list.¹⁴⁴ The greater the seniority points, the closer an employee will be to receiving a new position.¹⁴⁵ Military veterans receive additional seniority points, allowing them easier access to a higher place on the reemployment list.¹⁴⁶

Although AI creates job loss, the reality is that unemployment is only the short-term.¹⁴⁷ AI's implementation necessarily fosters new jobs, which maintain and develop the AI that previously displaced workers.¹⁴⁸ In addition, AI's automation of jobs—such as data input or clerical work—only creates information.¹⁴⁹ New careers, like that of data scientists, will emerge to interpret and apply the AI-generated information in a way that AI is not capable of doing.¹⁵⁰ Furthermore, the increased spending in the technology sector produces greater demand to develop and deploy technology, as well as jobs, that increases productivity for businesses,.¹⁵¹ In essence, AI's implementation will create jobs that analyze information and displace jobs that input information.¹⁵²

California's statutory requirements for reemploying displaced state workers aligns with California's Workforce Development Board ("CWDB") and California's Unified Strategic Workforce Development Plan ("State Plan").¹⁵³

^{142.} CAL. GOVT. CODE § 19130 (West 2019); SEIU LOCAL 1000, supra note 23.

^{143.} CAL. GOVT. CODE § 19997.2 (West 2019).

^{144.} CAL. GOVT. CODE § 19997.3 (West 2019).

^{145.} Id.

^{146.} See CAL. GOVT. CODE § 19997.6 (West 2019) (identifying that military veterans do not receive more than one year of additional seniority points if "they did not have any state service prior to joining military service").

^{147.} James Manyika et al., *Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation*, MCKINSEY & COMPANY (Dec. 2017), https://www.mckinsey.com/~/media/mckinsey/featured%20insights/Future%20of%20Organizations/What%20t he%20future%20of%20work%20will%20mcan%20for%20jobs%20skills%20and%20wages/MGI-Jobs-Lost-Jobs-Gained-Report-December-6-2017.ashx (on file with *The University of the Pacific Law Review*).

^{148.} Id. at 60.

^{150.} See *id.* at 112 (clarifying that AI cannot yet critically think to develop original ideas in the same sense that humans can).

^{151.} Id. at 60.

^{152.} Id. at 112.

^{153.} CAL. GOVT. CODE § 19998 (West 2019); see CALIFORNIA WORKFORCE DEVELOPMENT BOARD, SKILLS ATTAINMENT FOR UPWARD MOBILITY, ALIGNED SERVICES FOR SHARED PROSPERITY at 10 (2019) available at https://cwdb.ca.gov/wp-content/uploads/sites/43/2017/12/Unified-State-Plan-plain-text.pdf [hereinafter CWDB] (on file with *The University of the Pacific Law Review*) (describing the CWDB's role as helping develop California's Unified Strategic Workforce Development Plan regarding the reeducation and retraining of displaced workers).

California's Government Code mandates employees separated from state service—due to transformations such as technological changes—receive assistance from the state.¹⁵⁴ California must take steps to assist displaced employees in "locating, preparing to qualify for, and being placed in other positions in the state civil service."¹⁵⁵ The state, using CWDB's programs, can accomplish the task of preparing workers for different positions by enrolling displaced civil servants into reeducation and recertification classes.¹⁵⁶ These classes, advised by the AP's understanding of AI, will have resources guided towards teaching the updated skillsets needed for the new positions AI creates.¹⁵⁷

In anticipation of AI's increased use across various job sectors, private companies, such as Amazon, create classes related to AI, which educate and train its employees.¹⁵⁸ Understanding that warehouse jobs are susceptible to automation, Amazon's classes will train 100,000 employees for the skills needed to prepare for the jobs AI's implementation will create.¹⁵⁹ Additionally, the skills these employees gain can translate to careers outside the company because of AI's growing popularity and utilization.¹⁶⁰ If Amazon's classes prove successful, the CDT can utilize Amazon's lesson plans to help implement the classes into California's reeducation and retraining programs for displaced workers.¹⁶¹

The AP's advisory role would have combated the inevitable hard times for displaced civil servants.¹⁶² First, the AP's ability to evaluate AI's uses and effects allows the AP to ensure the CDT is complying with the Future Work Commission's recommendations in AB 594.¹⁶³ Then, by studying and analyzing which jobs AI will displace—and subsequently create—the AP may propose education programs to streamline displaced workers back into state civil service.¹⁶⁴ Furthermore, state-funded education and training programs ensure sufficiently qualified employees because the classes provide resources directed towards the newly created positions.¹⁶⁵ In addition, the new programs contribute to a more versatile workforce since the classes provide a multitude of marketable

^{154.} CAL. GOVT. CODE § 19998 (West 2019).

^{155.} Id.

^{156.} See James Manyika et al., *supra* note 147 (showing that the concept of retraining and reeducating a displaced workforce is not a novel concept. The 1944 GI bill enabled over eight million veterans by 1958 to receive reeducation or retraining to enter the workforce as qualified candidates).

^{157.} CWDB, supra note 153; see James Manyika et al., supra note 147.

^{158.} Amy Scott, From The Warehouse To IT: Amazon Offering 100,000 Workers Tech Training, NPR (July 11, 2019), https://www.npr.org/2019/07/11/740660070/from-the-warehouse-to-it-amazon-offering-100-000-workers-tech- (on file with The University of the Pacific Law Review).

^{159.} Id.

^{160.} *Id.*

^{161.} Id.; CWDB, supra note 153.

^{162.} AB 594, 2019 Leg., 2019–2020 Sess. (Cal. 2019) (as amended Aug. 30, 2019, but not enacted).

^{163.} Id.; CWDB, supra note 153.

^{164.} AB 594, 2019 Leg., 2019–2020 Sess. (Cal. 2019) (as amended Aug. 30, 2019, but not enacted).

^{165.} CWDB, supra note 153.

skills.¹⁶⁶ By facilitating the preparation and retraining of California's civil servants through state education programs, the CDT would have actively achieved AB 594's goals.¹⁶⁷

V. CONCLUSION

Modern public perception paints a haunting picture of AI that takes the negative aspects to logical extremes.¹⁶⁸ Although the negative aspects sometimes become reality—as in the case with Bernadette—unpleasant experiences are not standard.¹⁶⁹ AI's multifaceted nature permits its positive aspects to reach a variety of fields, bringing benefits to each one.¹⁷⁰ In the beginning, AI's implementation may create some employment issues for California civil servants.¹⁷¹ However, AB 594 addressed AI's potential issues in a multitude of ways.¹⁷²

Prior to AB 594, no state-funded positions existed to oversee and advise California about AI's unknowns.¹⁷³ Assembly Member Salas introduced AB 594 to dispel misconceptions about AI and establish a framework to prepare the state for AI's potential displacement of civil servants.¹⁷⁴ To accomplish this, California must balance legally replacing workers with AI against finding new positions within civil service for displaced workers.¹⁷⁵ Through utilizing reeducation and retraining classes, California can adequately prepare for, and subsequently minimize, the adverse effects AI may bring.¹⁷⁶ Although AI's initial implementation may produce cases like Bernadette's, the future holds an immensely improved quality of life by recognizing AI's extensive benefits.¹⁷⁷

^{166.} See id.

^{167.} AB 594, 2019 Leg., 2019–2020 Sess. (Cal. 2019) (as amended Aug. 30, 2019, but not enacted); SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*).

^{168.} See Genevieve Valentine, supra note 97 (highlighting the use of technology being integrated into human afterlife planning).

^{169.} Bernadette Callahan, supra note 1.

^{170.} See supra Part I.

^{171.} See supra Section IV.A.

^{172.} See supra Part III.

^{173.} SENATE COMMITTEE ON GOVERNMENTAL ORGANIZATION, COMMITTEE ANALYSIS OF AB 594, at 3 (July 8, 2019) (on file with *The University of the Pacific Law Review*).

^{174.} Id.

^{175.} See CAL. GOVT. CODE § 19998 (West 2019) (stating that when a state employee is displaced by automated functions, steps should be taken to assist the employee being placed in a new position); see supra Section IV.B.

^{176.} CWDB, *supra* note 153, at 86.

^{177.} James Manyika et al., supra note 147.