



# GEORGIA TECH.





# 1. Title Page

- a. Georgia Tech Institute of Technology
- b. Group Members Stephany Obakpolor Able Eteme Jessica Doanes Jie Feng Donald Yakam Hussein Issa
- c. The Twenty six of August, 2021
- d. Georgia Institute of Technology

Faculty of Professional education Data Analytics and Science department

## 2. Acknowledgment

This report presents a brief overview of weekly tasks held during 6 month Data Analytics bootcamp at Georgia Tech Institute of Technology.

I would like to express my deepest appreciation to all those who provided me the possibility to complete this report. A special gratitude goes to Mr. Tom whose contribution in stimulating suggestions and encouragement, helped us to coordinate my project especially in writing this report.

Furthermore, I would also like to acknowledge with much appreciation the crucial role of the staff "who gave the assistant and help needed to use all required equipment and the necessary materials to complete the task and invested full effort in guiding the team in achieving the goal.

I have to appreciate the guidance given by everyone especially in our project presentation that has improved our presentation skills thanks to their comment and advices.

#### **Our Mission**

We are committed to improving client outcomes by creating workplaces where diverse employees contribute to work practices and are empowered to achieve their full potential.

## **Our Expertise**

No matter how complex your business environment, we have the capabilities and experience to move you forward.

#### **Services**

We provide evidence-based, best-practice diversity and inclusion consulting and training solutions for developing a culture of inclusion and innovation in your organisation. Our services span advisory, strategy, implementation, diagnostics, and capability-building, all with the singular focus to help clients achieve maximum value.

Please see services provided below

## **Facilitation & Training**

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## **Diagnostics**

We assess the diversity and inclusion capabilities of your leaders, workgroups and individual employees.

## Keynote

Our experts possess a rare combination of subject-matter expertise and practical experience across varied sectors and geographical contexts.

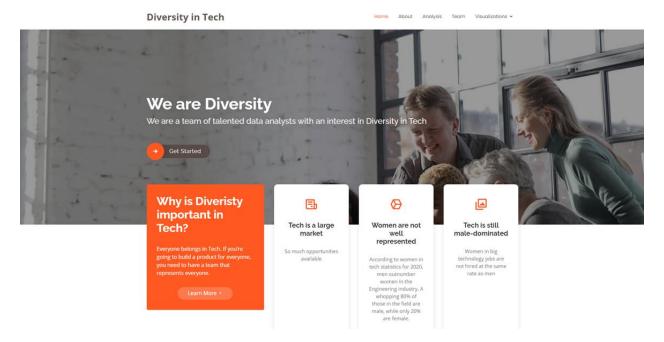
## **Digital Solutions**

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Below is one of our projects. Please feel free to reach out

#### Diversity--In--Tech



According to Reveal, the United States requires an annual submission of employee gender, race/ethnicity, and job type from all companies with more than 100 employees. (Rangarajan, 2018) Following submission this data was generally private. This project seeks to understand workplace diversity across tech companies in Silicon Valley in 2016 and the shifts in publicly sharing this data.

Data In 2018, Reveal from The Center for Investigative Reporting published a dataset, and the accompanying methodology, of 2016 Equal Employment Opportunity Commission (EEO) data for 211 tech companies in Silicon Valley. Click here to learn more about Reveal's methodology.

#### https://github.com/cirlabs/Silicon-Valley-Diversity-Data

We used 4 sources for this analysis.

EEO\_2016.csv provides detailed information on gender, race/ethnicity, and job type the companies that said yes in 2016\_EEO\_Release\_Status.csv

2016\_EEO\_Release\_Status.csv provides a list of the 211 that completed the survey. It indicates if 2016 EEO data was publicly shared or not.

Distributions\_data\_2016.csv provides percentages for gender, race/ethnicity, and job type for the 211 companies that completed. It does not provide data by name for the companies that did not release their 2016 EEO.

Transformation & Load We combined EEO\_2016.csv and Distrubutions\_data\_2016.csv to create our database. Following the cleaning process, the database contained more than 4,000 rows.

We then exported the database as a CSV file to create our visuals and analyze the results of three machine learning inquires.

## **Findings**

What are the top 10 companies committed to diversity and inclusion before 2018?

#### Gender

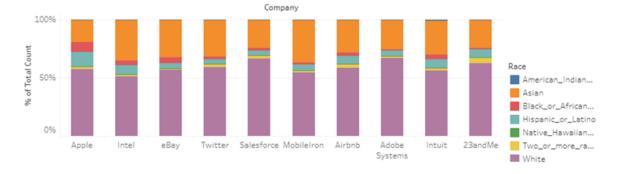
• 23 & Me, AirBnB, PayPal, Pinterest, Intuit, Lyft, LinkedIn, Sanmina-SCI, eBay, and Square.



#### Race

 Apple, Intel, eBay, Twitter, Salesforce, MobileIron, Airbnb, Adobe Systems, Intuit, 23 and Me

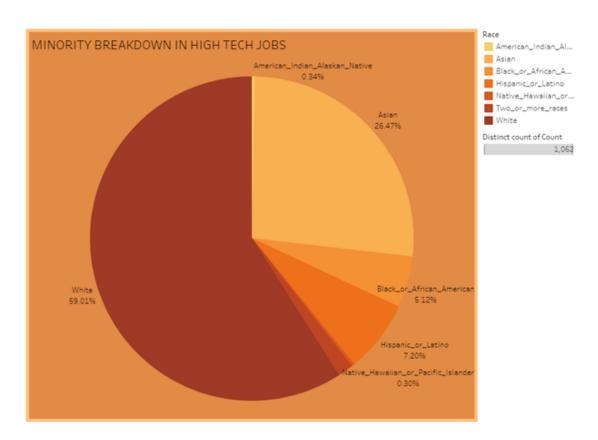




What is the breakdown of minorities in High Tech jobs?

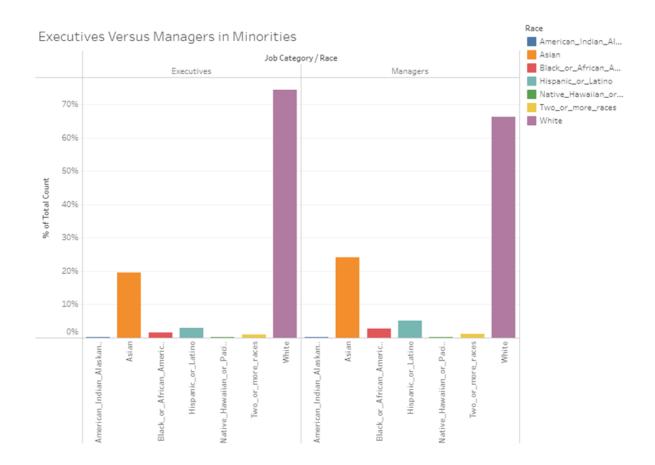
• 59.01% White

- 26.47% Asian
- 7.20% Latino/Hispanic
- 5.12% Black
- 1.56% 2 or more races
- 0.34% American Indian/Alaska Native
- 0.30% Native Hawaiian/Pacific Islander



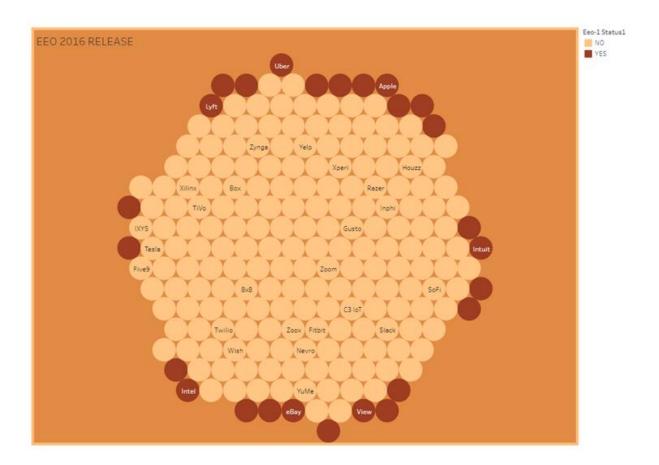
What is the breakdown of minorities in management versus executives?

• There is more racial and ethnic diversity amongst persons in managerial positions than executives in Silicon Valley.



Which companies did not share their 2016 EEO data publicly?

• The following companies did not release their 2016 EEO data publicly:

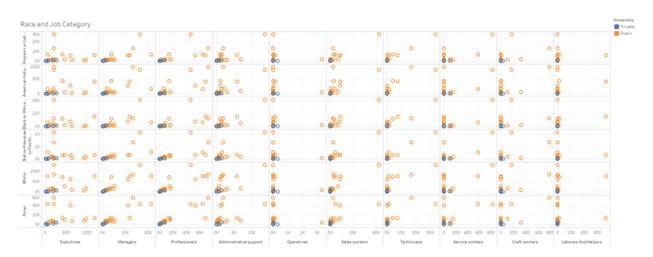


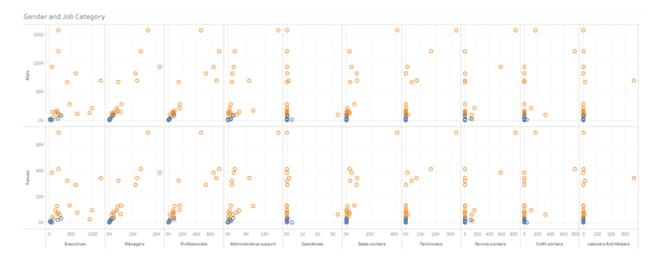
- A10 Networks
- Abaxis
- Accuray
- Advanced Micro Devices
- Aemetis
- Aerohive Networks
- Agilent Technologies
- Align Technology
- Anaplan
- AppDirect
- Applied Materials
- Applied Micro Circuits
- Apttus
- Arista Networks
- Automattic
- Aviat Networks
- Barracuda Networks

- Bio-Rad Laboratories
- Bloom Energy
- Box
- Brocade Communications
- C3 IoT
- Cadence Design Systems
- Callidus Software
- Carbon
- Cavium
- Chegg
- CloudFlare
- Coherent
- Coherus Biosciences
- Credit Karma
- Crowdstrike
- Cypress Semiconductor
- Depomed
- Docker
- Docusign

## Machine Learning

Three machine learning models are used to classify data into private and public: KneighborsClassifier(KNN), Support Vector Machine Tuning Model(GridSearchCV), Deep Learning Model(Sequencital). Accuracy Score of testing data is 0.714, 0.783, and 0.857 separately. It seems Deep Learning Model shows the best accuray score for testing data.





Sources Daley, S. (2021, May 5). Women in Tech Statistics Show the Industry Has a Long Way to Go. Built In. https://builtin.com/women-tech/women-in-tech-workplace-statistics Data. (2019, April 30). Inclusion Clearinghouse. https://inclusionclearinghouse.org/data/ Employers | U.S. Equal Employment Opportunity Commission. (2021). U.S. Equal Employment Opportunity Commission. https://www.eeoc.gov/employers Long, K. A. (2021, April 14). New Amazon data shows Black, Latino and female employees are underrepresented in best-paid jobs. The Seattle Times. https://www.seattletimes.com/business/amazon/new-amazon-data-shows-black-latinoand-female-employees-are-underrepresented-in-best-paid-jobs/Rangarajan, M. B. S. (2018, November 29). How we created a baseline for Silicon Valley's diversity problem. Reveal. https://revealnews.org/blog/how-we-created-a-baseline-for-silicon-valleys-diversityproblem/ Women in Tech Report. (2021). TrustRadius

CAPTCHA. https://www.trustradius.com/buyer-blog/women-in-tech-report

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