

# Michael Kung

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Self-motivated Data Analyst/Scientist who possesses a “get-things-done” attitude and thrives under-pressure. Experienced in analyzing data in order to drive successful business solutions. Proficient in machine learning, statistics, and analytics. Known among co-workers and team members for stellar problem-solving and communication on large-scale projects.

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## SKILLS

- Data and Quantitative Analysis
- Machine Learning: Scikit-Learn, Keras, PySpark
- Predictive Modeling
- Big Data Queries and Interpretation
- Data Mining and Visualization Tools
- Tableau
- Git
- Advanced Excel: Pivot Tables, VBA Scripting
- Fundamental Statistics: Modeling, Forecasting, SPSS
- Programming: Python, Numpy, Pandas, Matplotlib
- API Interactions, Social Media Mining
- Databases: SQL, MongoDB
- Web Visualization: HTML, CSS, Bootstrap, Dashboarding, JavaScript, Leaflet, Plot.ly, d3

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## EDUCATION / LICENSES / CERTIFICATIONS

**Data Analysis and Visualization Certificate:** University of Texas at Austin McCombs School of Business, Austin, TX

**Master of Science: Applied Cognition and Neuroscience:** University of Texas at Dallas, Richardson, TX

**Bachelor of Arts: Biology; Minor: Business:** Texas A&M University, College Station, TX

**Machine Learning | Stanford University,** Coursera, Issue Date: June 2019, [Credential ID:](#) HSQDYHPE4W6J

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## PROJECTS

**[Medical Insurance Charge Regression Modeling](#) | [GitHub](#):** In this notebook, I performed extensive exploratory data analysis and explore several types of Regression models (Multi Linear Regression, Polynomial Linear Regression, Decision Tree Regression, Random Forest Regression) on a Medical Cost dataset found on Kaggle to predict if medical costs based on several features.

- **Responsibilities:** Performed all exploratory data analysis, train/test all Regression Models, compare all models.
- **Tools / languages used:** Python, Scikit-Learn, LabelEncoder, OneHotEncoder, numpy, pandas, matplotlib, seaborn.

**[Cinematrix](#) | [GitHub](#):** A movie recommender app using a machine learning algorithm, matrix factorization, to recommend 5 movies a user has not watch. These recommendations are based on a user's previous movie ratings and other user ratings.

- **Responsibilities:** Tested multiple machine learning models. Utilized matrix factorization to make movie recommendations. Created Python script to show top 5 recommended movies. Generated the flask app to display the recommended movies, user data, and the web scrapped movie information. Hosted the app on to Heroku.
- **Tools / languages used:** Python (Pandas, NumPy, Flask, JSON), Web Scraping, HTML/CSS, Bootstrap, Tableau

**[US Demographic Interactive Visualization](#) | [GitHub](#):** An interactive visualization of state population density and city demographic. App uses multiple visualizations and popups to summarize data gathered from the US census API>

- **Responsibilities:** Data cleaning and upload to database. Created the HTML dashboard. Bound JavaScript popup with city demographic data to Leaflet dots. Flask app routes.
- **Tools / languages used:** Python (Flask), JavaScript (Plot.ly, d3, Leaflet), SQLite, HTML/CSS, Bootstrap

**[Belly Button Diversity](#) | [GitHub](#):** An interactive dashboard visualizing belly button diversity data from Rob Dunn Lab. (<http://robdunnlab.com/projects/belly-button-biodiversity/>). JavaScript is used to populate the dropdown options so user can select which sample ID to visualize. Plotly.js is used to create pie and bubble chart.

- **Responsibilities:** Created Flask App and dashboard. Wrote JavaScript script. Hosted the app on to Heroku.
- **Tools / languages used:** Python (Flask), JavaScript (Plot.ly, d3), jQuery, HTML

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## EXPERIENCE

**System Administrator + Office Manager | Fidelity Dental P.A. |** May 2017 - Currently

- Spearhead new patient acquisitions. Increased number of monthly new patients by 400% through data analysis and marketing strategies.
- Develop and structure a MySQL database to collect and analyze practice data such as production/collection of each dentist and patient demographics.
- Generate data visualizations to report practice performance, financial analysis and profit/loss reporting.
- Install/maintain/configure practice management software and computers.

**Graduate Student Researcher | University of Texas at Dallas |** Jan. 2016 – May 2017

- Utilized SPSS to run statistical analysis to analyze the relationship between neurochemistry and behavioral data.
- Conducted and created visualizations for data presentations and data analysis using advanced excel.