

# Allen Chen

San Francisco, CA

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## SKILLS

**Languages:** SQL, Python | **Libraries:** sklearn, numpy, pandas, Fastai, PyTorch, PIL, streamlit, BeautifulSoup, Selenium, psycopg2, sklearn, gensim | **Data Visualization:** Tableau | **Machine Learning:** Regression, Classification, Unsupervised Learning, NLP, Deep Learning | **Cloud/Data Storage:** GCP, Heroku, PostgreSQL | **People:** rapport building, communication and presentation skills, empathy, active listening, ethics and morals

## EXPERIENCE

### Metis

(June 2020 – September 2020)

Data Scientist: Developed data science skills through project oriented curriculum

College Basketball Predictor: Predicted outcome of college basketball games (68% accuracy, MAE 8.9)

Feature engineering: Developed season-to-date cumulative advanced stats for each team and game

Model: Final linear model predicts how much a team will win (or lose) by, using only six input variables

Fitness Planner: Determined which diets and exercise regime have an impact on fitness level (e.g. vigorous exercise)

Data acquisition: Sourced from National Health and Nutrition Examination Survey

Data storage: Used PostgreSQL database such that each table contained different sections of the survey (sourced as separate XPT file) and then updated for each survey year.

Model: Classification model (logistic regression) determined level of fitness based on diet and exercise; this provided insight on which tactics are correlated with which fitness levels

Customer Behavior Analyst, Venmo: Uncovered trends and use cases for Venmo (e.g. late night alcohol drinking)

Data acquisition: Collected transaction data through Venmo-api

Feature engineering and NLP: Converted emojis into words, applied word embeddings, and converted documents to vectors

Modeling: K-means clustering algorithm identified common themes for venmo transactions

Body Fat Estimator: Developed web app (<http://bfnetestimator.herokuapp.com>) to estimate body fat from images

Data acquisition: Images and metadata labels manually collected and cropped from public Instagram posts

Model: Trained a modified ResNet50 convolutional neural network as a regression task

### Willis Towers Watson, Health and Benefits

(June 2009 – September 2019)

Associate Director, 2018 - 2019

- Consulted on plan design, strategy, budgeting, and administration of employee health and welfare benefits
- Serviced three to five self-funded employers ranging from 5,000 to 50,000+ employees across technology, education, and healthcare industries; responsible for managing \$1-2M in annual recurring revenue
- Managed client relationships in all aspects including pursuit, planning, delivery, wrap-up, and invoicing

Consultant, 2014-2017

- Led internal teams by overseeing project scope, budget, timing, and quality of deliverables
- Led RFPs and managed vendors across medical, dental, vision, disability, life, pharmacy, spending accounts, stop loss insurance, data warehouse, and wellness programs
- Managed direct reports by collaboratively setting goals, holding regular check-in meetings, obtaining feedback from project leads, and conducting performance reviews.

Senior Analyst, 2011-2013

- Performed actuarial and financial work including premium rate development, contribution setting, IBNR/reserving, financial reporting, self-funding analysis, cost trend evaluation and projection, stop loss analysis, Medicare Part D compliance, creditable coverage, and retiree outsourcing strategy
- Developed Towers Watsons' inaugural Perks Study to benchmark High Tech industry's employee perks

Actuarial Analyst, 2009-2010

- Performed on-site clinic feasibility studies to build business case for employers to offer clinics
- Modeled impact of healthcare reform and excise tax to support benefit strategies

## EDUCATION

University of California, Berkeley — B.A., Economics and Statistics; B.S., Business Administration

Society of Actuaries — Associate of Society of Actuaries