

Jack Vessa

Data Scientist | San Francisco, CA

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SKILLS & KNOWLEDGE

- **Languages:** Python, SQL, HTML, CSS, Unix, Java
- **Tools & Technologies:** NumPy, Pandas, Scikit-Learn, APIs, Web Scraping, Git, MongoDB, Docker, PostgreSQL, AWS, Data Cleaning/Visualization, Spark, Flask
- **Machine Learning:** Linear/Logistic Regression, Regularization, Random Forest, Gradient Boosting, NLP, Matrix Factorization, Neural Networks

EXPERIENCE

Galvanize, San Francisco, CA

August 2019 - Present

Data Science

- **Capstone Projects:**
 - **Genius Groups:** Built a Web Application to assist teachers in forming student groups from assessment data. The Website was built using Flask and hosted on an Amazon EC2 Instance.
 - **USA Charities:** Analyzed United States charities to find insights on donation patterns by region and category. Performed hypothesis testing and created data visualizations using Seaborn and Choropleth maps.
- **Case Studies:**
 - Built a movie recommendation system using matrix factorization & collaborative filtering ensemble
 - Performed NLP analysis of 400,000 wikipedia pages using K-Means Clustering
 - Predicted user churn from ridesharing company data using Gradient Boosting Classification model
 - Predicted heavy equipment auction prices using multiple linear regression

Teach for America, San Francisco Bay Area, CA

June 2017 - Present

Rising Leaders Fellow, Corps Member

- Selected from more than 45,000 applicants to join the national teacher corps of 6,000 recent college graduates
- Trained in TFA “boot-camp” to learn teaching strategies, educational pedagogy, and systemic obstacles to learning
- Led STEM track professional development for 1st and 2nd year corps members on building student confidence and accountability in the math classroom
- Developed extensive collaboration experience and skills focused on educational equity

Making Waves Academy, Richmond, CA

August 2017 - June 2019

Upper School Mathematics Teacher: AP Statistics and Algebra II

- Taught, and individually supported 200+ 10th-12th grade students in progressive charter school environment
- Led a professional development session for 50 faculty, staff, and school leadership team members on the implementation of digital gamification resources in classrooms
- Increased student AP-Statistics passing rate by 200%

ACTIVITIES

VandyHacks

November 2015 - May 2017

Sponsorship Team (2016); Participant (2015)

- Secured more than \$63,500 from company sponsors, optimized sponsor experience and engagement

Vanderbilt Men's Lacrosse

August 2013 - May 2017

President, Captain, and Treasurer

- Responsible for team management, finances, and fulfillment of SELC and university requirements

EDUCATION

Loyola Marymount University, Oakland, CA

June 2019

Master of Arts, Urban Education: *Digital Learning Concentration*

Thesis Research Project: Digital Gamification in the STEM Classroom

Vanderbilt University, Nashville, TN

May 2017

Bachelor of Science, School of Engineering, Major: *Engineering Science*

Double Minor: *Computer Science, Human & Organizational Development*