

Jack Vessa

Data Scientist | San Francisco, CA | 516-510-2821

 [Portfolio](#) |  <https://github.com/jackvessa> |  www.linkedin.com/in/jackvessa |  jackvessa@gmail.com

SKILLS & KNOWLEDGE

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

EXPERIENCE

Galvanize, San Francisco, CA
Data Science Resident, Fellow

August 2019 - Present

- **Capstone Projects:**
 - **Charity Recommender:** CharityRecommender.com | [GitHub Repo](#)
Built charity recommendation web application to connect people to new and impactful charities based on previous donations, providing options to identify local charities based on specified categories.
 - **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.
- **Case Studies:**
 - Built a fraud detection model for event company using logistic regression and deployed website on Flask
 - Built a movie recommender 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
Rising Leaders Fellow, Corps Member

2017 - Present

- 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

Making Waves Academy, Richmond, CA

2017 - 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

2015 - 2017

Sponsorship Team (2016); Participant (2015)

- Obtained \$63,500 from company sponsors, optimized sponsor / participant experience and engagement

EDUCATION

Loyola Marymount University, Oakland, CA

2019

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

Thesis Research Project: Digital Gamification in the STEM Classroom

Vanderbilt University, Nashville, TN

2017

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

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