

# Jack Vessa

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

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

## SKILLS & KNOWLEDGE

- **Coding Languages:** CSS | C++ | HTML | Java | JavaScript | Python | SQL | Unix
- **Tools/Technologies:** A/B Testing | APIs | AWS | Data Cleaning/Visualization | Docker | Flask | GitHub | MongoDB | NumPy | Pandas | Scikit-Learn | Spark | Tableau | Web Scraping
- **Machine Learning:** Gradient Boosting | LDA | Linear/Logistic Regression | Matrix Factorization | Neural Networks | NLP | Random Forest | Regularization | SVD | SVM | XGBoost

## EXPERIENCE

**Galvanize**, San Francisco, CA

**August 2019 - Present**

*Data Scientist in Residence*

- Instruct and support 24 Data Science Immersive students in Python, machine learning and statistical inference
- Develop software tools for student grouping, plan and facilitate weekly coding and interviewing workshops

*Data Science Fellow*

- **Projects:**
  - **Charity Recommender:** [www.CharityRecommender.com](http://www.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 and similar charities based on specified categories.  
**Tools/Tech:** Python, Gensim LDA, Flask Web Framework, AWS Elastic Beanstalk, Tableau Visualizations
  - **Genius Groups:**  
Built a web application to assist teachers in forming student groups from assessment data.  
**Tools/Tech:** Python, KMeans Clustering, Flask Web Framework, AWS EC2
- **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
  - 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

**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

**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*