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

- **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 Science Resident, Fellow

- **Projects:**
  - ***Charity Recommender:*** 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. 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 **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*