Akhil Jalan

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EDUCATION

University of California, Berkeley   **GPA: 3.95/4.00**

B.A. Applied Mathematics (Concentration: Machine Learning), Highest Honors.   Aug 2015 - May 2019

TECHNICAL SKILLS

Languages (Experienced): Python, R,
Languages (Basic): Java, Julia, Javascript
Tools: Docker, Kubernetes, Spark, AWS ecosystem (S3, EC2, RDS), GraphQL

WORK EXPERIENCE

Software Engineer   Palo Alto, CA

WeWork, Research and Applied Sciences Team   Aug 2019-Present

- Automated location scoring model in Python and R to score 100,000+ locations for potential economic value, to improve strategy and sourcing for market intelligence, real estate, and sales teams
- Built persistent, real-time sales deal evaluation by integrating Python Flask API with external GraphQL service from real estate deals team
- Verified geo-coordinate accuracy for all internal locations using bounding-box search on OpenStreetMap

Data Science Intern   Foster City, CA

Agari   Jun 2018-Aug 2018

- Built new subject-line feature in email risk model to achieve 72% test accuracy on random forest/logistic regression in Python scikit-learn, and testing word-vector embeddings in Spark
- Enabled impostor detection rule in email-risk model for phishing attack detection, by analyzing rules-based filters on 10 million+ emails in Spark

Undergraduate Researcher, Multiple Projects   Berkeley, CA

Professors A. Sahai, G. Ranade, N. Srivastava   Feb 2018-May 2019

- Proposed and trained 99% accurate radio demodulation predictor, using recurrent neural networks (RNNs) in Python Tensorflow
- Created open-source Python module for facility location analysis, and applied it to find optimal placements of hospitals for 2.6 million-person dataset for accessibility, capacity, and equity

PROJECTS

Machine Learning for Counterterrorism (Collaborative)

- Predicted successful terrorist attacks with 93% accuracy using random forest model in Python scikit-learn
- Used regression analysis to isolate weapon/target type as most predictive features of attack success

Deep Neural Style Transfer via Cyclic Generative Adversarial Networks (Collaborative)

- Fine-Tuned Google image style transfer network using an ensemble of 3 convolution neural networks (CNNs) for a cycle-GAN in Python Tensorflow

HONORS AND AWARDS

2nd Place Team, Citadel Securities Summer Invitational Datathon (50+ teams).   Summer 2018.

Finalist Team, Data for Good Competition, UC Berkeley Center for Technology, Society, and Policy.   Spring 2018.