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

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.

WORK EXPERIENCE

Software Engineer Palo Alto, CA

WeWork, Research and Applied Sciences Team Aug 2019-Present

- Automated 5-component ensemble model to score 50,000+ potential WeWork locations in US/Canada for economic value via (i) demographics, (ii) amenities, (iii) employers, (iv) market quality, and (v) urbanization
- Enabled persistent, real-time sales deal evaluation by integrating Flask API with external deal-tracking GraphQL service
- 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 by testing low-dimensional word embeddings (e.g. word2vec, GloVe) for predictive accurac
- Enabled impostor detection rule in email-risk model 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

- Trained 99% accurate radio demodulation predictor, using Recurrent, Long Short Term Memory (LSTM) neural networks with randomly generated data subject to noisy perturbation
- Found a simultaneously optimal placement of 3 hospitals for 18 distinct measures of accessibility, across health insurance, racial, and income groupings, with a 2.3-approximation factor

PROJECTS

Machine Learning for Counterterrorism (Collaborative)

- Predicted success rates of terrorist attacks with 93% accuracy using random forest model
- Found weapon/target type as most predictive features of attack success, via sensitivity analysis

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

- Fine-Tuned image style transfer network using 3 ensemble convolution neural networks (CNN) for generalized neural style transfer in cycle-GAN framework

TECHNICAL SKILLS

Languages: Python (most proficient), Java, R, Julia, Javascript

Tools (Software): GraphQL, Flask, SQLAlchemy, Docker, Kubernetes, Helm

Tools (Data Services): Spark, Amazon Web Services (AWS) S3, AWS EC2, Google Cloud Compute