ARNAV GARG

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EDUCATION

University of California, Los Angeles (UCLA) *Sep 2017 - Dec 2020*
Bachelor of Science (B.Sc.), Computer Science

Courses: Data Structures, Algorithms and Complexity, Machine Learning, Artificial Intelligence, Database Systems, Operating Systems, Secure Software Design, Networking Principles, Computer Architecture
Other Courses: Neural Networks, Deep Learning, Hyperparameter Tuning: Optimization and Regularization, Structuring Machine Learning Projects, Convolutional Networks, Sequence Models

EXPERIENCE

Machine Learning Intern, Atlassian *Jun 2020 - Sep 2020*
- Trained Skipgram (Word2Vec) embeddings using Spark to transform user-generated analytics events into user behavior representations as new features into existing models and for user segmentation for targeted marketing
- Embeddings increased performance of existing models by 10%, significantly boosting Atlassian's user growth initiatives

Software Engineer Intern, Tesla, Inc. *Sep 2019 - Dec 2019*
- Discovered major flaw with a $2MM component in Tesla's manufacturing process and developed a multithreaded, message-queueing service to stress test the Autopilot SOCs as a fix for future Tesla vehicles
- Created a low latency, real-time dashboard to monitor the stress test system across Tesla's global manufacturers, boosting Autopilot SOC issue resolution time by over 50%
- Implemented a Flask NLP service to assign Jira issues from a mail server, improving issue creation flow by 20%

Software Engineer Intern, Espressive *Jun 2019 – Sep 2019*
- Developed deep learning models based on BERT, Transformers, CNNs, etc., for sentence similarity, metaphor paraphrasing, information retrieval and context comprehension to reduce false positives in Espressives virtual service agent
- Productionized highly optimized versions of trained models that improved chatbots accuracy by 20%
- Implemented new feature to bulk import knowledgebase articles from ServiceNow to decrease onboarding time by 50%

Software Engineer, Sike Insights (Sike AI) *Dec 2018 - Jun 2019*
- Built a web app to understand an employee's compatibility with their co-workers and provide personalized actionable insights for managers to improve employee productivity and reduce employee turnover
- Developed a Python wrapper around DynamoDB that uses symmetric stream encryption to secure user email data

Data Science Intern, InMobi *Jun 2018 - Sep 2018*
- Developed a deep neural network to predict the likelihood of users installing the Starbucks mobile app if shown Starbucks advertisements that improved the Starbucks app installation conversion rate by over 30%
- Implemented a library of Keras callbacks for hyperparameter tuning to save time in companys deep learning projects

PERSONAL PROJECTS

- **Cosine**: Real-time deep learning service to track and summarize unread parts of predatory legal documents as well as provide text analytics to the sender to improve their legal documents
- **Dr.Ai**: Voice-based smart conversational AI for disease and disease severity detection. Web app can also setup end-to-end encrypted telemedicine appointments on the fly
- **StudySmart**: Web app to reserve study rooms across all of UCLAs libraries and report real time busyness levels
- **PalliativeCare**: Machine learning engine to match terminal cancer patients with volunteers based on personality using IBM Watson

SKILLS

Programming Languages: Python, C++, C, Java, Bash, Ruby, HTML5, Javascript, CSS/SCSS, Lisp
Software + Frameworks: Ansible, AWS, Express.js, Docker, Flask, GCP, Git, Hive, Jenkins, jQuery, Kafka, Keras, Kubernetes, Microsoft Azure, MongoDB, MySQL, Node.js, PostgreSQL, PyTorch, RabbitMQ, React.js, Spark, Superset, TensorFlow, Tableau
Machine Learning Models: Linear Regression, Logistic Regression, SVM, Decision Tree, Random Forest, Naïve Bayes, XGBoost, K-Means Clustering, X-Means Clustering, Agglomerative Clustering, KNN
Deep Learning Models: Neural Network, CNN, RNN, LSTM, GRU, Transformer, GAN, BERT, Resnet, Inception-v4

AWARDS

- hackNY Fellow '20 (<1% acceptance rate)
- Microsoft Imagine Cup 2020 Regional Semifinalist
- CalHacks 2019 - 1st Place, Best use of Microsoft Azure, 2nd best use of DocuSign eSignature API
- TreeHacks 2018 – Winner of Health Vertical

LEADERSHIP AND ORGANIZATIONS

- Co-Founder, Co-President at UCLA DataRes (UCLAs only data science organization)
- Backend Developer at UCLA DevX
- ML Engineer at Wilke Lab