Jaegook (Alex) Kim

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EDUCATION

Georgia Institute of Technology | Atlanta, Georgia

Master of Science in Computer Science - Machine Learning

Aug 2023 - May 2025 GPA 4.00/4.00

Georgia Institute of Technology | Atlanta, Georgia

Bachelor of Science in Computer Science - Intelligence and Theory

Aug 2018 - May 2023 GPA 3.86/4.00

WORK EXPERIENCE

Zoox, Amazon Subsidiary | Foster City, California

Sep 2024 - Dec 2024

ML Infrastructure Engineering Intern

- Designed an ETL pipeline, processing 2M daily logs and created dashboards to analyze ML model resource utilization
- Improved KPI retrieval speed by 5x by adding new API endpoints and creating fields to streamline data access
- Implemented a 85% cache-hit rate data registry to optimize number of requests to cloud and server storage

Volvo Group | Greensboro, North Carolina

May 2024 - Aug 2024

Data Science Intern

- Architected an ORM-based database system handling 200+ regulations, automating vehicle compliance verification
- Reduced CAN data processing time by 10% for vehicle testing with query optimizations and bulk copies
- Created real-time dashboards tracking 1,000+ vehicle tests, enabling testers to quickly identify bottlenecks

Georgia Tech College of Computing | Atlanta, Georgia

Aug 2022 - Present

Teaching Assistant: Graduate Algorithms & Computing in Python

- Instructing and assessing 1300+ masters students each semester interested in ML and algorithms
- Integrated auto-personalized feedback system to enhance coding techniques and learning for over 5000 students

DuckAl | Atlanta, Georgia

May 2023 - Aug 2023

ML Software Engineering Intern

- Built a convolutional neural network to classify formula types from LaTeX documents with 83% accuracy
- Curated and processed a dataset of 10,000 LaTeX documents and webpages, for robust training and evaluation

NCR Corporation | Atlanta, Georgia

May 2020 - Aug 2020

Software Engineering Intern

- Developed a web app analyzing product demand across 3 gas stations, optimizing inventory costs for higher profits
- Initiated a feedback system, collecting 1000+ responses and improving customer satisfaction scores

SKILLS

Programming: Python, C#, Java, SQL, C++, JavaScript, Typescript, CSS

Platforms: AWS, .NET, Kubernetes, Azure, Docker, Comet ML, OpenSearch, Postman, Google Firebase, Jira, Linux **Software/Tools:** Tableau, PowerBI, Figma, Git, Bazel, MongoDB, Looker, AutoCAD, S3, EC2, Redis, Redshift, Blazor **Frameworks:** Numpy, Pandas, Pytorch, Tensorflow, SQLite3, Entity Framework, Flask, Scikit-Learn, Scipy, React, D3,

RESEARCH/PROJECTS

Detecting Counterfeit Amazon Products, Natural Language Processing

Aug 2023 - Mar 2024

- Fine-tuned BERT and Llama2 on 2,000 Amazon products and 300,000 reviews to classify counterfeit products
- Authored paper on model performance of 65% recall 54% F1-score within a 1:1000 fraud-to-legitimate ratio

Predicting Flight Delays, Data Science & Machine Learning

Aug 2023 - Dec 2023

- Deployed an 86% accuracy random forest model by curating and training on a 500,000 flight and weather dataset
- Integrated APIs to process live flight and weather data, handling 1,000+ daily requests with sub-second latency

HBCU and GT Collaboration Initiative, Data Science & Research

Aug 2022 - Dec 2023

- Led the new academic collaboration initiative between 13 HBCUs and GT to promote educational equality
- Evaluated key metrics to identify optimal research partnerships, resulting in a new grant that impacts 100+ students

Hateful Content Detection in Memes, Deep Learning

Mar 2023 - May 2023

- Designed DL models using BERT, GPT2, XLNet, and ResNet with 60% accuracy determining hateful text/images
- Published a 6-page report on how the model can prevent the spread of hate speech in online communities

Jill Watson IBM Design & Intelligence Lab, Al in Education

Sep 2019 - May 2020

- Increased precision from 71% to 86% using knowledge graphs with Neo4j, connecting similar student questions
- Incorporated the BERT algorithm to improve the virtual teaching assistant agent search coverage of the syllabus