AKHIL GOEL

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EDUCATION

Georgia Institute of Technology, Atlanta, GA *Aug 2018 - July 2023*
M.S. in Computer Science - Machine Learning GPA: 3.5/4.0

Notable Coursework: Machine Learning (ML), Natural Language Processing (NLP), Interactive Robot Learning (Reinforcement Learning), Convex Optimization, High Performance Computing (HPC), Quantum Computing, Dynamic Algebraic Algorithms, Cryptography & Blockchain, ML for Trading/Computational Biology

B.S. in Mathematics & Computer Science GPA: 3.67/4.0

Notable Coursework: Data Structures, Advanced Algorithms, Object-oriented Programming (OOP), Deep Learning, Computer Vision, Robotics, Artificial Intelligence (AI), Computer Architecture, Systems, Databases, Computer Networking, Information Security, Automata and Complexity, Linear Algebra, Vector Calculus, Probability, Statistics, Stochastic Processes, Algebra, Real/Complex/Combinatorial/Numerical Analysis

Thomas Jefferson High School for Science and Technology (TJHSST) *Aug 2014 - May 2018*

WORK EXPERIENCE

Google LLC May 2022 - August 2022
Softare Engineering Intern *Mountain View, CA*

- Designed and implemented subscription free-trial abuse detection algorithms on Google Play Store.
- Leveraged asynchronous gRPC protocols to enable high-throughput abuse checks with little to no latency cost
- Analyzed revenue impact of abuse checks and created user experiments to enable ramp-up of abuse verdicts.

Meta (Facebook AI Applied Research) May 2021 - August 2021
Softare Engineering Intern *Menlo Park, CA*

- Developed influential instance model interpretability algorithms for Captum, an open-source PyTorch library.
- Implemented novel algorithms from recent research publications and created tutorials for influence methods.
- Designed rigorous testing frameworks and applied algorithms to large Facebook AI Multimodal models.

Varian Medical Systems May 2020 - August 2020
Softare Engineering Intern *Atlanta, GA*

- Built automized data preprocessing pipeline for developing local deep learning segmentation models.
- Developed deep volumetric models for organ segmentation within Varian's oncology PACS, Velocity.

MIT Lincoln Laboratory June 2019 - August 2020
Summer Research Intern & Student Technical Researcher *Lexington, MA*

- Used Monte-Carlo simulations to develop a time-gating algorithm for a novel brain imaging technique.
- Co-Authored conference publication at SPIE Photonics West, San Francisco, February 2020.
- 1st Place Team prize for proposal on automatic American Sign Language translation. Received funding.

TECHNICAL SKILLS

Programming Languages Python, C/C++, Java, CUDA, Bash
Technologies & Tools PyTorch, Keras, Numpy, Pandas, Git, Docker, AWS, MPI, Qiskit, Solidity

LEADERSHIP & EXTRACURRICULAR

External Operations - The Agency: President for AI/ML research club at Georgia Tech.

GTA - Computer Vision: Led keypoint matching project (SIFT), taught students in office hours.