

AKHIL GOEL

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EDUCATION

Georgia Institute of Technology, Atlanta, GA
Bachelors of Science in Mathematics & Computer Science
College of Science Dean's Grant Scholarship

Aug 2018 - May 2023 (Expected)
GPA: 3.79/4.0

Thomas Jefferson HS for Science & Technology

July 2014 - June 2018

WORK EXPERIENCE

Facebook AI Applied Research
Software Engineering Intern

May 2021 - August 2021
Menlo Park, CA

- Implemented model interpretability algorithms for Captum, an open-source PyTorch package.
- Designed and developed a library for influential instance methods for machine learning models.
- Created tutorials and applied algorithms to Facebook AI Multimodal models for platform integrity.

Varian Medical Systems
Software Engineering Intern

May 2020 - August 2020
Atlanta, GA

- Built automated data preprocessing pipeline for developing local deep learning segmentation models.
- Developed deep volumetric models for organ segmentation within Varian's oncology PACS, Velocity.
- Presented project & pitched call-to-action to panel of Varian executives, received a top score.

MIT Lincoln Laboratory
Summer Research Intern & Student Technical Researcher

June 2019 - August 2020
Lexington, MA

- Used Monte-Carlo simulations to develop a time-gating algorithm for a novel imaging technique.
- Conference paper at SPIE Photonics West, San Francisco, February 2020. "Towards Automatic Time-Gating for Time-Domain Diffuse Correlation Spectroscopy." Paper available at bit.ly/AGpaper1.
- Implemented convolutional neural network architectures for nuclei segmentation.
- 1st Place Team and Best Poster in Intern Innovative Idea Challenge for proposal on automatic American Sign Language translation. Received funding for continued project development.

PROJECTS

Visually Grounded PointGoal Navigation at CVMLP Lab

August 2021 - Current

Research on visually-grounded navigation in dynamic environments. Advised by Prof. Dhruv Batra.

Autonomous Robot Navigation at Georgia Tech IVALab

Jan 2019 - May 2020

Applying reinforcement learning algorithms to improve traditional local planning methods in robotics.

TECHNICAL SKILLS

Programming Languages

Python, C/C++, Java, Bash

Software & Tools

Git, PyTorch, Numpy, LaTeX, Mathematica

Concepts & Coursework

Probability Theory, Statistics, Combinatorics, Numerical Analysis, AI, Stochastic Processes, Data Structures, Algorithms, Computer Vision, Deep Learning, Vector Calculus, Linear Algebra, Comp. Architecture

LEADERSHIP & EXTRACURRICULAR

The Agency - External Operations: President for the undergraduate AI/ML research club at Georgia Tech. Lead weekly beginner workshop series on deep learning, prepare and deliver lectures, plan events.