AKHIL GOEL

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EDUCATION

Georgia Institute of Technology, Atlanta, GA *Aug 2018 - May 2021 (Expected)*
Bachelors of Science in Mathematics & Computer Science — GPA: 3.86/4.0

Thomas Jefferson HS for Science & Technology *July 2014 - June 2018*

WORK EXPERIENCE

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

- Used Monte-Carlo simulations to develop a dynamic time-gating algorithm for a biomedical imaging technique called Time-Domain Diffuse Correlation Spectroscopy.
- Upcoming poster presentation at SPIE Photonics West, San Francisco, February 2020.
- Implemented convolutional neural network architectures for neclei segmentation and quantification of neurodegenerative disease biomarkers.
- 1st Place Team and Best Poster in Intern Innovative Idea Challenge for proposal on automatic American Sign Language translation. Receiving funding for continued project development, pursuing patent.

GoVivace Inc. — July 2018 - Aug 2018
Research Intern — *McLean, VA*

- Researched on using deep learning to enhance speech recognition accuracy.
- Leveraged Kaldi toolkit to work on developing improved signal-to-noise ratio estimates, allowing for a better balance between the acoustic model and language model.

PROJECTS

American Sign Language Translation at MIT Lincoln Laboratory *June 2019 - Present*
Developed project proposal for automatic American Sign Language translation through deep learning with a team of six other interns. Continued research development is funded by MIT Lincoln Laboratory

Autonomous Robot Navigation at Georgia Tech IVALab *Jan 2019 - Present*
Applying reinforcement learning algorithms to improve traditional local planning methods in robotics.

TECHNICAL SKILLS

Programming Languages	Python, C/C++, Java, Bash, Matlab
Software & Tools	Git, PyTorch, TensorFlow, OpenCV, LaTeX, Mathematica, ROS
Concepts & Coursework	Data Structures, Algorithms, AI, Computer Vision, Machine Learning, Deep Learning, Object-Oriented Programming, Prob/Stat Theory, Applied Combinatorics, Vector Calculus, Advanced Linear Algebra

LEADERSHIP & EXTRACURRICULAR

The Agency - Treasurer: Officer for the AI/ML research club at Georgia Tech. Preparing lectures, planning events, leading weekly beginner workshop series on deep learning fundamentals and applications.

AWARDS & ACHIEVEMENTS

Qualifier for the 2018 and 2015 American Invitational Mathematics Examination (AIME)

Semifinalist (Top 500 in the nation) for the 2017 and 2016 USA Biology Olympiad (USABO)