

Oliver Lee

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EDUCATION

Georgia Institute of Technology

Bachelor of Science in Electrical Engineering (GPA: 4.00)

Atlanta, GA

May 2025 - Dec. 2027

Georgia Institute of Technology

Bachelor of Science in Computer Science (GPA: 4.00)

Atlanta, GA

Jun. 2023 - Dec. 2025

TECHNICAL SKILLS

Programming: Python, C/C++, Bash, Java, MATLAB, SystemVerilog, VHDL

Software: Cadence Innovus, Git/GitHub, KiCAD, Klayout, ModelSim, Ngspice, OnShape, FreeCAD, Quartus Prime

Tools: 3D Printing, Laser Cutting, Multimeter, Oscilloscopes, Light Microscope, Spin Coater, Plasma Etcher, IR Thermal Microscope

WORK EXPERIENCE

Research Assistant

Georgia Tech Research Institute (GTRI), GA

May. 2026 - Dec. 2026

- Fabricating carbon nanotube (CNT) infrared emitter pixels using micro/nano-fabrication techniques including photolithography, plasma etching, and CNT deposition
- Working on developing a 8×8 CNT emitter array for infrared scene projection.

Research Computing Facilitator Intern

Partnership for an Advanced Computing Environment (PACE) at Georgia Tech, GA

May 2025 - May 2026

- Assisted with parallel computing workflows (OpenMP) and improved PACE web infrastructure by resolving accessibility and reliability issues; completely resolved all existing accessibility errors as of August 2025.
- Supported researchers using Georgia Tech's Phoenix HPC cluster through software installation, environment configuration, and workflow troubleshooting.

RESEARCH EXPERIENCE

Research Assistant

Integrated Computational Electronics (ICE) Lab at Georgia Tech, GA

Aug. 2025 - Present

- Collaborated with 4 other members in the development of the ASHES tool used for programming Field Programmable Analog Arrays (FPAAs) and generating tapeout files for analog computing applications.
- Verifying ASHES capabilities by implementing and validating OTA buffers on the FPAA through the unified flow to demonstrate functional coverage and toolchain correctness.

Research Assistant

Jia Laboratory for Systems Biophotonics at Georgia Tech, GA

Sep. 2024 - Dec. 2025

- Developed a Python codebase for 3D Multifocal Scanning Microscopy (3D-MSM), improving speed and efficiency compared to the original MATLAB implementation.
- Co-authored of a peer-reviewed publication, "Resonant multi-focal scanning super-resolution microscopy with extended depth and field-of-view."

PROJECTS

- **Code-A-Chip 2026.** Implemented an open-source ASIC physical design flow using LibreLane and the SKY130 PDK and developed Python scripts to characterize and visualize timing behavior of delay-locked loop (DLL) circuits.
- **PixShift.** A DIY camera with a custom 64 pixel camera sensor PCB mounted on a linear actuator. It is capable of taking grayscale images with resolutions up to 8 by 16 pixels.

EXTRACURRICULAR ACTIVITIES

Physical Design Team Member

SiliconJackets

Nov. 2025 - Present

Member

GT Nanotechnology and Photonics Society

Jun. 2026 - Present