Pius Lee (piusl@andrew.cmu.edu) | plee.app

SUMMARY

Incoming undergraduate with hands-on experience in research driven by deep technical exploration and impactful innovation. Worked with highly endowed universities on multiple research projects and pedagogical development.

EDUCATION

Carnegie Mellon University **Expected Graduation: Spring 2029**
B.S. in Business Administration & Artificial Intelligence *Pittsburgh, PA*

WORK EXPERIENCE

Machine Learning Analyst **Jan. 2025 – Apr. 2025**
OpenAI & Mercor Corporation *Remote*

- Analyzed generative pretrained transformers (GPTs) for code quality and reasoning accuracy.
- Reviewed competitive programming tasks using line-of-reasoning models.

Teaching Assistant, MIT BWSI Quantum Computing **Jan. 2024 – Aug. 2024**
MIT Lincoln Laboratory *Lexington, MA*

- Lectured on quantum mechanics/computing/algorithms to 32 top students selected from 350+ applicants.
- Supported teams implementing quantum algorithms from academic papers.
- Helped students transition from classical to quantum computing workflows.

Research Assistant, UGA Optics **Aug. 2023 – Jul. 2024**
University of Georgia, Abate Nano Optics Group *Athens, GA*

- Simulated bent-molecule interactions using real-time molecular dynamics (10,000 particles).
- Developed simulation in C with custom many-body physics models under Dr. Yohannes Abate's supervision.
- Research contributed to nanoscale optics studies and infrared spectroscopy models.

PASSION PROJECTS

Eule: A multi-modal transformer for CCTV footage **May 2024 – Dec. 2024**
A multi-modal transformer model that aims to quantify CCTV footage

- A general, feature-extraction & embedding-space based model that's optimized to extract data.
- Vid2JSON benchmark performance currently matches state-of-the-art (t. TwelveLabs, 93%; Ours, 92%)!
- Raised $120k in Microsoft grants — technologies used: TensorFlow, CUDA, numpy, SciPy

Towards the Commercialization of Quantum Computers **Jul. 2023 – Apr. 2024**
A research project partnered with the University of Washington.

- Collaborated with the University of Washington on a research project optimizing low-cost quantum computers.
- Topics of research include: optimization of low-field nuclear magnetic resonance (NMR), design and implementation of NMR devices, and chemical analysis (abnormal nuclei, C-13).

ACHIEVEMENTS

UCLA Regents Scholarship **Apr. 2025**

- Scholarship awarded to 75 out of 146,276 applicants. Awardees "are selected on the basis of demonstrated academic excellence, leadership and exceptional promise."

MIT Berman Award **Aug. 2023**

- Awarded to 1 in 32 of 2,400 applicants to the BWSI Quantum program. Chosen by the instructor for leadership, initiative, and a passion for exploring advanced quantum topics beyond the curriculum.

SKILLS & INTERESTS

- **Languages**: Java, C/C++, Python, React, LaTeX, C#/.NET, Rust, NodeJS, HTML/CSS/JS
- **Characteristics**: Problem-solving, critical thinking, creativity, adaptability, initiative, and leadership.
- **Interests:** Weightlifting; Composting; Hiking; Traveling; Fishing; Skiing; *Frasier*