

Leo Liang

Rochester, NY

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EDUCATION

University of Rochester

Rochester, NY (anticipated May 2026)

B.S. in Applied Mathematics, B.A. in Computer Science, Minor in Music

GPA: 3.91/4.00

Additional Activities: Primary Piano Student at the Eastman School of Music, Sigma Phi Epsilon Fraternity

AWARDS

DAAD RISE Scholarship

Awarded one of 250 scholarships by the German DAAD to conduct a research internship in Germany over the summer.

Honoree of the 11th Heidelberg Laureate Forum:

Nominated and selected as one of 200 students worldwide by the IMU, ACM, and DNVA to spend a paid-for week in Germany interacting with laureates of mathematics and computer science (Fields Medal, Turing Award, etc.).

Phi Beta Kappa 2023 Suzanne J. O'Brien Book Award:

Nominated and selected as one of 15 out of 1500 first-year students for scholarly achievement, humanistic values, co-curricular activity, and leadership potential.

WORK EXPERIENCE

Research & Development Intern | SLAPStack GmbH

Dortmund, Germany (Jun – Aug 2025)

- Collaborated in a seven-member early-stage startup developing AI-driven, automated warehouse logistics solutions.
- Architected and implemented an error measurement and management framework for Automated Guided Vehicles (AGVs), forming high-level mathematical models and converting into low-level programmatic implementations; documented workflows with SysML sequence and activity diagrams (*contact me to see my work on GitHub*).
- Developed and optimized AGV routing algorithms & built a MQTT-based Docker testing framework with paho-MQTT and SciPy for AGV telemetry, enabling data collection and ML regression to fine-tune simulation parameters.

Co-Founder | CampusLens

Rochester, NY (Aug 2024 – Jan 2025)

- Co-founded a startup leveraging machine vision to detect occupancy positions and quantities in physical spaces, focusing on cost efficiency and allowing users to manually categorize spaces in the detection space.
- Prototyped and pitched a model with a Raspberry Pi 4 and infrared cameras, trained with Roboflow, to the University of Rochester's IT department, securing funding for further research and development.
- Interviewed and managed a team of four full-stack developers and machine vision researchers.

Teaching Assistant | University of Rochester Department of Mathematics

Rochester, NY (Aug 2023 – Present)

- Achieved a 4.93 out of 5 evaluation from 200+ students, by incorporating theoretical materials into relevant real-world applications/trends and leading weekly group/individual office hours tailored to students' needs.
- Collaborated closely with professors to develop original tests and written solutions, bridging theory with real-world applications

RESEARCH & PROJECTS

ML-Driven Calibration of AGV Simulation (*publication in progress with Dr. Alexandru Rinciog, TU Dortmund*)

- Developed an ML-driven regression framework to calibrate Automated-Guided-Vehicle simulation parameters, reducing prediction error and improving operational safety.

Blackjack Stochastic Modelling (Java, Python)

- Designed and built a simulation platform for blackjack variations to identify significant optimal strategies for FreeBet using statistical modeling, combinatorial game theory, and Monte Carlo methods.

TECHNICAL SKILLS

- Languages: Python, Java, C, SQL, R, JavaScript, HTML, CSS
- Packages & Framework: TensorFlow, PyTorch, SciPy, paho-MQTT, NumPy, Pandas, Matplotlib
- Modeling & Design: SysML, PlantUML