

Leo Liang

Rochester, NY

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EDUCATION

University of Rochester

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

Rochester, NY (anticipated May 2026)

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