Leo Liang

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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; Dean's Scholarship; Dean's List all semesters

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

Notable Coursework:

Artificial Intelligence, Deep Learning, Data Structures & Algorithms, Database Systems, Design & Analysis of Efficient Algorithms, Honors Modern Physics, Linear Algebra, Numerical Analysis, Operations Research, Probability, Stochastic Processes

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.

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

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.

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 in 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

Investment & Wealth Management Intern | Lucia Capital Group   **San Diego, CA** (May - Jul 2023)

- Significantly shortened client-advisor merger wait times from days to near instant, by automating a CRM operational process using screen-scraping and Power Query, improving the firm's overall efficiency, presented to the IT team leading to adoption and integration in systems.
- Reinforced client and financial advisor meetings by generating weekly reports for buy-side operations with market research, consolidation of client information, and implementation of strategies such as DCA and VA in client portfolios.

PROJECTS / RESEARCH

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.