

Anthony Lieu

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EDUCATION

Rochester Institute of Technology

Bachelor of Science in Software Engineering

GPA: 3.89/4.0

Rochester, NY

Expected May 2027

EXPERIENCE

Software Engineer Co-op

RIT Department of Software Engineering

January 2026 – Present

Rochester, NY

- Collaborating on a self-directed team to design and develop the SCOOP Portal, a web application for managing future co-op programs and facilitating communication between supervisors and students.

Software Engineer in Test Co-op

Excellus BlueCross BlueShield

June 2025 – Aug. 2025

Rochester, NY

- Improved code quality across 6 shared libraries by developing comprehensive JUnit test suites, increasing coverage from 30–40% to 90–100% and ensuring reliability for downstream teams.
- Debugged and resolved critical production issues reported by other engineering teams, including a logging defect that masked error types, improving system observability and troubleshooting efficiency.
- Maintained technical documentation by updating user guides and README files for shared repositories, enabling seamless adoption and integration by new users.

PROJECTS

Say Less | Python, React, Redis, PostgreSQL, AWS

Jan. 2026 – Present

- Built Java WebSocket server on AWS EC2 to manage real-time multiplayer lobbies, implementing server-authoritative timers and game state validation to ensure synchronized gameplay and prevent cheating.
- Developed React frontend to capture and stream microphone audio via WebSocket, rendering live game state including lobby management, countdown timers, and player scores.
- Provisioned AWS infrastructure using Terraform (EC2, ElastiCache, IAM) and integrated AWS Transcribe Streaming to convert voice input to text, storing game state in Redis with hash maps and sorted sets.

Intelligent Stock Market News Analyzer | Python, React, MySQL, AWS

Sep. 2025 – Dec. 2025

- Developed Python Lambda functions to fetch real-time news data from Tiingo News API, process sentiment analysis using AWS Comprehend, and store results in RDS database for frontend consumption.
- Built React frontend components to display stock market news and sentiment visualizations, integrating with AWS API Gateway to retrieve and render analysis results for user interaction.
- Developed GitHub Actions workflow to automate Terraform provisioning and teardown of AWS infrastructure, while building and deploying React application to S3 for static website hosting.

U-Fund | Java, Angular, Spring Boot

Aug. 2024 – Nov. 2024

- Facilitated Agile development for 5-person team by managing product backlog, conducting sprint planning sessions, and performing code reviews to ensure code quality and on-time delivery.
- Developed Angular components for donation and volunteer workflows, integrating frontend with backend REST APIs through HTTP services.
- Engineered REST API endpoints using Spring Boot to handle charity postings, donations, and volunteer registration with secure authentication.

TECHNICAL SKILLS

Languages: Java, Python, C, TypeScript/JavaScript, HTML/CSS

Frameworks: Angular, React, Spring Boot, Flask, JUnit, Pytest, Selenium

Databases: PostgreSQL, MySQL, Redis

Cloud & DevOps: AWS, Terraform, Docker, Github Actions

Developer Tools: Git, GitHub, VS Code, Visual Studio, IntelliJ IDEA, Maven, npm, Slack, Trello