

Ivan Lin

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EDUCATION

Rochester Institute of Technology

July 2021 - May 2026

Bachelor of Science in Software Engineering, Minor in Computer Science

Rochester, NY

- Courses: Software Architecture, Operating Systems, AI/ML, Algorithms, Databases, Embedded Systems, UI/UX

EXPERIENCE

Georgia Tech Research Institute

May 2024 – Aug 2024

Software Engineer Intern - Applied Systems Laboratory

Orlando, FL

- Built a KML data management app using C# and WinForms, delivering easy access to viewing and modifying training data for stakeholders
- Used C++ and WPF to correct one-the-fly UI and flight maneuvers for VECTS UH-60M training simulation
- Wrote threat table parsers to support the US Army, advancing processing efficiency in threat assessment
- Automated process of generating distribution reports, streamlining compliance and cut deliverable time by ~20%
- Collaborated to revamp system UI and operational performance of ABE and FireFly systems by identifying and rectifying 15+ critical bugs

Integral Ad Science

June 2023 – Aug 2023

Data Engineer Intern - Walled Garden Team

New York, NY

- Collaborated in the development of an automated anomaly detection feature using Airflow DAGs, Docker containers, and Spark queries to analyze over 15 petabytes of data daily
- Refactored EC2 Airflow instances to enable systematic monitoring and alerting of data trends and anomalies, integrating AWS SNS and Lambda for immediate notification of irregularities
- Developed data visualization tools using Plotly and Dash to provide stakeholders with real-time insights
- Enhanced ETL pipeline efficiency through optimized parallel processing query requests across BigQuery, Glue, and Snowflake

ESL Global Cybersecurity Institute - RIT

Aug 2024 – Present

Undergraduate Researcher

Rochester, NY

- Developed a supervised neural net model with UC Irvine datasets, achieving 83.7% accuracy using PyTorch, CUDA, Scikit-learn, and XGBoost
- Researching on refining machine unlearning in pre-trained gradient boosted neural networks

TECHNICAL SKILLS

Languages: Python, Java, C, C++, C#, JavaScript, HTML/CSS, SQL, Julia, Bash, Go

Libraries/Frameworks: PyTorch, Scikit-learn, React, .NET, Angular, Django, FastAPI, Flask, Maven, Spring Boot

DevOps: AWS, GCP, Docker, Git, GitLab, Jenkins, Airflow

Databases: MongoDB, PostgreSQL, MySQL, Snowflake, Kafka, Spark

Concepts: Machine Learning, Backend, Unit Testing, Agile, REST APIs, TCP/IP, Unix/Linux, Systems Design, UML

PROJECTS

YC Analytics | *Python, Pandas, Kafka, Spark, Docker, Plotly*

- Constructed a data pipeline to analyze Y Combinator data from Kafka streams using Spark and Pandas, providing visual insights via Plotly

Harmonify | *Embedded C, GPIO, USART, ADC/DAC, Interrupts*

- Constructed a MIDI player with Embedded C on an ARM Cortex-M4 board, integrating GPIO, USART, ADC/DAC, and interrupts for real-time communication between input and audio devices

Homelytics | *Python, FastAPI, Uvicorn, Scikit-learn, Pandas, Matplotlib*

- Full-stack application that allows user to compare housing price data for a given location; leveraged React frontend; Python with FastAPI backend with Uvicorn for Restful APIs; integrated clustering with Scikit-learn and Pandas