Kevin A. Luong

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Education

Rochester Institute of Technology (RIT)

B.S., Software Engineering Minor: Applied Statistics

• GPA: 3.7/4.0

Work Experience

ICS Controls, Rochester, NY

Aug 2024 - Dec 2024

Software Engineering Co-Op

- Designed, developed, and deployed a Recipe Editor Web Application with a REST API backend using Node.js and a TypeScript-based front end, ensuring clean and efficient code.
- Implemented recipe management features (create/edit/filter) that streamlined data entry and reduced manual setup time by 40%, demonstrating strong problem-solving skills.
- Built dynamic filtering and real-time editing capabilities that improved user workflow efficiency and reduced query response delays by approximately 30%.
- Utilized Git for version control and maintained detailed documentation of version releases, deployment processes, and user manuals to support robust software maintenance.

RIT Innovation Fellows, Rochester, NY

Aug2023 - Dec 2023

Engineering Intern

Contributed to a MITRE-sponsored project by developing a Digital Twin to mirror real space, aligning with agile software development practices.

- Developed a 3D digital twin prototype using Nerf Studio and Unreal Engine to enable real-time visualization of engineering environments, emphasizing collaborative problem-solving.
- Architected, designed, and constructed a comprehensive 3D model using Nerf Studio, Gaussian Splatting, and Instant NGP in conjunction with Unreal Engine, ensuring high standards of design.
- Co-authored technical documentation and research papers on the Metaverse, Digital Twins, and VR, contributing to clarity in technical communication and best practices.
- Engaged in entrepreneurial and startup learning experiences to refine project management and innovation methods in a dynamic development environment.

Precision Optical Transceivers, Henrietta, NY

Sept 2022- Jan 2023

Software Engineering Co-Op

- Engineered user-friendly and scalable website features using Django views, models, forms, and templates, improving internal tool adoption.
- Designed and optimized complex MySQL queries and schemas, reducing average query execution time by **35%** and improving efficiency in managing large-scale optics data.
- Built and deployed interactive UI components and backend systems to support optical network management at scale, enabling **5,000+ weekly database updates** with **zero downtime**.
- Leveraged a modern development stack (Python, Django, JavaScript, MySQL, RESTful APIs) and tools (HeidiSQL, VS Code, Git) to deliver production-ready features ahead of schedule.

PROJECTS

Contrax Fantasy Football App

Jan 2025 - Aug 2025

Senior Project

- Developed frontend for a fantasy football platform using React Native + TypeScript, enabling franchise management and contract/salary cap visualization.
- Implemented state management with Zustand to support seamless login persistence and real-time data sync.
- Collaborated with 7-person team, integrating frontend with Node.js/Go backend APIs and PostgreSQL.

NutriApp Mar 2022 - May 2022

Group Project

- Led 5-member team to design health-tracking app for meals, macros, and exercise.
- Created UML designs and system architecture diagrams; facilitated Scrum ceremonies.

Technical Skills

- Programming Languages: Python, Java, C++, C, JavaScript, TypeScript
- Frameworks/Tools: React, Next.js, Node.js, Django, Docker, AWS(Cloud Computing), TailwindCSS
- Databases: MySQL, PostgreSQL, MongoDB, SQL Manager, TablePlus
- Other: Agile/Scrum, Git(Version Control), Linux, Unit Testing (PyTest, JUnit), IIS, Data Structures, SDLC, Software Patterns