Kevin Ma

341-500-1098 123kevinma123@gmail.com linkedin.com/in/kevinma2003 github.com/123kevinma123

Education

Purdue University **Aug. 2021 – May 2025**
B.S Computer Science *West Lafayette, Indiana*

Relevant Coursework

- Artificial Intelligence, Algorithm Analysis, Computer Architecture, Computer Systems, Data Mining and Machine Learning, Data Structures, Informational and Database Systems, Systems Programming

Projects

Full Stack Yugioh Trading Platform | *React, Express, MongoDB*

- Developed a responsive Yugioh trading platform using HTML, CSS, React, Express, and MongoDB.
- Integrated MongoDB via Atlas to store and manage user profiles, card listings, and transaction history, ensuring efficient data retrieval, storage, and scalability.

Portfolio Website | *APIs, HTML, CSS, React*

- Designed and developed a dynamic personal portfolio website using HTML, CSS, and React, seamlessly integrating NASA's Picture of the Day API to enrich the user experience and showcase proficiency in web development technologies.
- Implemented responsive web design techniques and optimized the website for performance, accessibility, and cross-browser compatibility.
- Achieved a 20% increase in online visibility by creating an engaging user experience and attracting a broader audience through seamless API integration.

Online Discussion Forum | *Java*

- Spearheaded a team of six in the collaborative development of a feature-rich Java-based discussion forum using Scrum methodologies.
- Designed and implemented a Purdue-Themed GUI via Java's Swing package, incorporating user authentication and multithreading, significantly enhancing user engagement and communication.
- Engineered a secure client-server architecture utilizing TCP/IP protocols to ensure a reliable and seamless platform performance.

Technical Skills

- **Languages:** C, C++, CSS, HTML, Java, JavaScript, Python
- **DB Languages:** MongoDB, Neo4j, SQL
- **Technologies/Frameworks:** ExpressJS, Linux, NodeJS, React

Experience

Purdue Space Program | *Avionics Software Lead*
Rocket Flight Computer System | *C, C++* **Jan. 2023 - Current**

- Designed and developed a high-performance flight computer system using STM32 development boards, Neo-6M GPS Arduino modules, and BMP280 Pressure & Temperature sensors.
- Leveraged C, C++, and Arduino to implement a wide range of features, including failsafe reboots, real time data collection, and sensor redundancy.
- Collaborated with hardware teams to integrate the flight computer into the rocket's avionics system, meeting stringent safety and performance requirements.
- Ensured precise altitude, pressure, and temperature data collection for competition rockets, with a 50% net increase in measurement accuracy.