HARRY JUNG

harryjng@umich.edu | https://www.linkedin.com/in/harryjungg | Ann Arbor, Michigan

EDUCATION

University of Michigan – Ann Arbor   September 2021 - April 2025
B.S. in Computer Science

Relevant Coursework: Data Structures and Algorithms, Mobile App Development, Web Systems, Computer Organization, Artificial Intelligence, Linear Algebra, Computer Vision, Discrete Mathematics

EXPERIENCE

Akima   Herndon, Virginia
Software Engineering Intern   May 2024 - Aug 2024

- Built an **XR tool** with **Meta Quest 3**, **Unity3D**, and **C#** for accurate 3D construction site visualization.
- Cut design review time by **25%** and boosted collaboration efficiency by **30%** with virtual walkthroughs.
- Created a military **Emergency 911 system** using **React.js**, **Express.js**, **MySQL**, **AWS**, and **Leaflet**.
- Improved response time efficiency by **30%** with geospatial mapping and real-time data integration.

Real-Time Computing Lab   Ann Arbor, Michigan
Research Assistant   April 2024 – Sep 2024

- Developed a **Kotlin** algorithm in **Android Studio** to prevent shoulder surfing with low user disruption.
- Optimized screen blurring for close distance reading while reducing wide angle recognition rates by **30%**.
- Conducted **user testing** to optimize visibility and security, leading to a **20%** reduction in CPU and memory usage through system improvements.

University Professional Technological Club   Ann Arbor, Michigan
Lead Website and App Developer   April 2023 – Present

- Implemented club **mobile app** and **website** zetapi.tech with **Flutter** and **JavaScript**, featuring an automated event calendar system that eliminated scheduling conflicts.
- Engineered a secure **authentication system** with **RBAC** to manage member resources and access levels.
- Established a **CI/CD** pipeline with **GitHub** Actions, reducing testing and deployment time by **30%**.

AKP Sports Foundation   Bethesda, Maryland
Software Engineering Intern   Aug 2023 - Sep 2024

- Managed sporting operations for the Asian American community across America, using **data-driven strategies** and technology to improve event coordination and participant engagement.
- Streamlined document processing with **Google Apps Script**, reducing manual workload by **25%** weekly.
- Enhanced data accuracy by **15%**, developing a **JavaScript** data entry with validation and error tracking.

PROJECTS

Autonomous Robotic Vehicle Machine Learning Team   Sep 2023 – Dec 2023

- Devised **proximity** and **motor decision algorithms**, advancing toward a street-legal autonomous car.
- Refined **TensorFlow** and **OpenCV** for object detection, securing a **3rd place** finish at the IGVC.
- Designed training pipelines, processing **1000+** images with **sub-100ms** for real-time object classification.

Black and White Scene Colorization   Sep 2024 - Dec 2024

- Constructed a colorization model in **Python/TensorFlow** to color black-and-white landscape photos.
- Preprocessed images in **LAB** color space and built a **CNN** to predict color classes and boost vibrancy.
- Achieved a score of **4.19/5** in surveys comparing colorized to real images, limited by a 1,000-image dataset.
- Tackled overrepresentation and improved performance through **ablation** and **hyperparameter** tuning.

NBA Performance Prediction System   Jan 2023 - May 2023

- Generated an **85%** accurate **scikit-learn** model to forecast player performance and key success metrics.
- Scraped and stored daily NBA stats using **Beautiful Soup** pipeline and **MySQL** for real-time analysis.
- Utilized **explanatory analysis** to reveal a **10%** offensive efficiency boost through optimized shot selection.

SKILLS

- **Programming & Development**: Python, Java, C/C++, JavaScript, C#, HTML/CSS, React.js, Flutter, MATLAB, Google Apps Script
- **Tools, Frameworks & Libraries**: TensorFlow, scikit-learn, React Native, OpenCV, Pandas, NumPy, Git, GitHub, Jira, Confluence, Android Studio, Figma, Adobe After Effects, Unity 3D
- **Systems, Databases & Cloud**: MySQL, AWS, Linux/Unix