Daniel Johan

dwjohan12@gmail.com | 714-853-9836 | 2583 Mill Lane, Fullerton CA
https://djohan12.github.io | https://www.linkedin.com/in/daniel-johan-739a55267/

EDUCATION

University of Notre Dame | Notre Dame, IN   August 2022 - May 2026
Bachelor of Science | Computer Science and Engineering   *GPA: 3.92 | Dean's List | Tau Beta Pi*

SKILLS

Languages: Python, C, C++, Java, Golang, HTML, CSS, JavaScript, bash, MATLAB
Technical: GitHub, REST API, Flask, PyTorch, Tensorflow, openCV, Jupyter, Machine Learning, Linux, Statistics, Linear Algebra

RELATED COURSEWORK

Data Science, Computer Vision, Game Development, Computer Graphics, Natural Language Processing, Introduction to AI, Operating Systems Principles, Data Structures, Algorithms, Computer Architecture

INTERNSHIPS/EXPERIENCE

KPMG | Dallas, TX   June 2025 – August 2025
Enterprise Architecture Intern
- Prototyped AI agents integrating **LeanIX APIs** with **OpenAI**, automating analysis of **100+** enterprise architecture components and reducing manual reporting time by **40%**.
- Presented AI-enhanced insights to executives, highlighting opportunities for **20%** cost savings across enterprise processes.

University of Notre Dame & Lockheed Martin | Notre Dame, IN   September 2024 – Present
Machine Learning Engineer Intern
- Developed **autonomous multi-agent simulations** that increased search-and-rescue mission success rate by **75%** and reduced simulated response time
- Optimized **ML** pipelines with **LangChain** and **RAG,** decreasing data processing time by **60%** while integrating **OpenAI API** for structured decision outputs.

Yaskawa | Kitakyushu, Japan   May 2024 – June 2024
Researcher
- **Collaborated with Japanese university students** to develop and refine a calibration algorithm for a robotic arm in microchip production, reducing positioning errors to **<100 microns** and increasing simulated throughput by **15%**.

Kubota | Tokyo, Japan   July 2024 - August 2024
Researcher
- Designed a **PID-controlled** autonomous tractor system in **C**, enabling simulated tractor trajectory corrections with less than 5° deviation on uneven terrain and improving simulated efficiency by 20% compared to baseline.

PROJECTS AND ACTIVITIES

Mini Golf Game | University of Notre Dame
- Developing a **3D mini golf game** in **Godot** with **Blender** models; implemented physics-based ball interactions and **ray-traced** lighting to enhance visual fidelity and gameplay immersion for a playable prototype.

SteamPunk Discord Bot
- Built a **full-stack Discord bot** with **Python** backend and **Go** frontend for a server of **600+ users**, optimizing **REST API** calls and pipelines to provide low-latency, real-time game and player data notifications.
- Integrated API caching and rate-limiting to support over **10,000** requests/day without performance degradation.

Object Tracking Robot
- Designed a robot using a U-Net Neural Network for real-time object tracking with **92% accuracy**, processing **60 frames/sec** via **multithreading** for continuous tracking of multiple objects.
- Conducted training on a **3,000+** image dataset, improving robustness to lighting changes and occlusions.

Notre Dame Robotic Football   August 2023 - Present
- Managing code for **20+** robots, integrating **computer vision** with arUco markers, improving throwing accuracy and movement precision, and reducing error in dynamic simulations.

CS for Good   August 2022 - May 2024
- Engineered a **Django/Python** backend with a scalable database, enabling real-time progress tracking for **100+** students and reducing latency by **30%**.