

Kyle Park

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EDUCATION

The Ohio State University, College of Engineering

Columbus, OH

Bachelor of Science in Computer Science and Engineering, Minor in Mathematics

Expected Graduation: May 2026

Cumulative GPA: 3.603/4.0; Dean's List, National Buckeye Scholarship Recipient

Relevant Coursework: Data Structures & Algorithms, Discrete Structures, Software I+II, Systems I, Diff Eq, Lin Alg, Calc III

WORK EXPERIENCE

The Ohio State University, Department of Mathematics

Columbus, OH

Research Assistant

Oct 2024 – Present

- Collaborate with Dr. Sanjeevi to develop research proposals and academic papers within fields of fast algorithm and linear algebra implementation to drive towards published works, in addition to participating in the Young Mathematics Conference
- Develop and create advanced computational models for analyzing null spaces and their dynamic intersections with geometric structures of cones and wedges using Python, by utilizing frameworks and libraries including NumPy, SciPy, and Matplotlib

The Ohio State University, Department of Computer Science & Engineering

Columbus, OH

Teaching Assistant, CSE 1223

Sep 2024 – Present

- Assist 40+ students enrolled in Introduction to Java during lab 2 times a week, ensuring understanding of basic algorithms, data structures, and programming, providing constructive criticism for over 100 homework, labs, and project assignments
- Increased average grades of all students by ~10% from last year, demonstrating effective and efficient teaching methodologies

The Ohio State University, Department of Computer Science & Engineering

Columbus, OH

Teaching Assistant, ENGR 1181

Aug 2024 – Present

- Teach 60+ students enrolled in Foundations of Engineering with MATLAB, Excel, OnShape, and other engineering tools
- Received a 95% score on Student Evaluation of Instruction report, representing a high satisfaction rate amongst students
- Hold office hours weekly to aid individuals with homework, test preparations, programming difficulties, and mental wellness

LEADERSHIP & INVOLVEMENT

Buckeye Vertical

Columbus, OH

Software Engineer

Oct 2024 – Present

- Developed and executed a C# scripts in Unity to automate the generation of 20,000+ synthetic images for model training
- Utilized AWS cloud computing resources to efficiently train a YOLOv8 object detection model on generated datasets
- Generated synthetic data using Domain Randomization principles for over 12,000+ target combinations
- Trained image processing architecture, consisting of YOLO, OCR, & OpenCV achieving 95% accuracy on real data, in addition to programming high-accuracy localization algorithms to predict geospatial coordinates of vision targets for a drone

OHI/O

Columbus, OH

Sponsorship Team

Sep 2024 – Present

- Network with 100+ companies each semester, raising over \$100,000 throughout the year for all OHI/O events and programs
- Serve as the main form of connection for ~7 companies, organizing meetings, resources, transactions, and any inquiries
- Help construct, direct, and judge Hack, Construct, Make, HighSchool OHI/O for over 2600+ CSE and interested students

PROJECTS

TravelPal

Columbus, OH

Team Member

March 2024

- 2nd place at Make OHI/O with 50+ teams competing in a 24 hour time frame - project details surrounding AI and mobility
- Utilize AI to dynamically create optimal graphs with machine learning algorithms, incorporating breadth-first-search to provide the fastest path from one point to another, respective of any individual's impairments or ability to traverse with ease
- Created a C++ program consisting of over 300+ lines to develop an interactive system integrated with the Arduino hardware
- Emulate human movement using a joystick, outputting directions through a LCD screen and Morse Code for directions

SKILLS & INTERESTS

Technical Skills: Java, Python, MATLAB, JavaScript, HTML, CSS, Visual Basic for Application

Software: Eclipse, NetBeans, VSCode, Unity, TinkerCAD, OnShape, SolidWorks, Git, Microsoft Office

Languages: English (native), Korean (conversational), Mandarin (beginner)

Interests: Art of Sound, Game Theory, Saxophone, Piano, Golf, Basketball, Weightlifting

