Kyle Pish

(309)-808-9154 | pishkyle@gmail.com | LinkedIn: kyle-pish | Github: kyle-pish

Education

Illinois Wesleyan University | GPA: 3.7/4.0 **Expected Graduation, May 2025**
Bachelors in Computer Science | Minor in Data Science Blooomington, IL

Courses: Algorithm Design & Analysis, Computer Networking, Deep Learning, Artificial Intelligence, Applied Data Analysis, Software Development, Programming Languages, Computational Organization-Architecture, Computational Biology

Relevant Skills

Languages: Python, Java, JavaScript, HTML/CSS, C++, C, Rust, OCaml, MIPS
Frameworks & Libraries: PyTorch, NumPy, TensorFlow, Flask, Scikit-learn, Pandas, Keras, PyGame, Matplotlib
Tools: Git, VSCode, MySQL, SQLite
Platforms & Technologies: Linux, Windows, MacOS, Multithreaded Programming, Socket Programming

Projects

Neural Network-Based Player Detection System | Python, PyTorch, YOLO
- Developed a neural network system to detect and classify players in a rendered 3D environment (the video game Counter-Strike) using Python, PyTorch, and YOLOv5.
- Implemented a custom model using Python's Keras library consisting of 14 layers and over 3,000,000 parameters.
- Collected and labeled nearly 4,000 data samples for efficient model training.

Multiplayer Video Game | Python, PyGame, MultiThread programming, Socket Programming
- Developed a multiplayer game using Python's PyGame library, implementing a custom client-server networking protocol over TCP to enable real-time data transfer between clients and the server.
- Utilized Python's pickle library for efficient serialization and deserialization of messages between server and clients
- Integrated core gameplay features, including player health, multiple lobby support, power-ups, and a custom map

Social Media Application | HTML, CSS, JS, Python, SQL, Flask
- Collaborated with a team using Agile methodologies to develop a fully interactive social media web platform.
- Utilized Git for version control, ensuring seamless collaboration, tracking changes, and maintaining an organized codebase throughout the development cycle.
- Focused on front-end development using HTML, CSS, and JavaScript, contributing to user interface and experience.

Portfolio Website | HTMLS, CSS | www.kylepish.com
- developed a personal portfolio website to showcase ongoing projects, skills, and experiences.
- Utilized HTML and CSS to create an engaging user interface.
- Implemented Responsive Design: Ensured the website's layout adapts seamlessly to various screen sizes and devices, providing a consistent user experience across desktops, tablets, and smartphones.

Experience

Computer Science Teaching Assistant (Intro to Comp Sci | Algorithm Design & Analysis) **August 2023 - Present**
Illinois Wesleyan University | *Bloomington, IL*
- Provide support to 20+ students learning fundamental algorithmic topics, including Big-O analysis, sorting algorithms, dynamic programming, and more.
- Provide detailed feedback on assignments in Java, covering implementations of Binary Search Trees, AVL Trees, and Heaps, to improve students' understanding of data structures
- Attend weekly meetings with professors where the direction of class and performance of the students is discussed.
- Collaboratively work with course instructor to identify areas that require additional attention during lecture.

Information Technology Intern **December 2023 - August 2024**
Brick Technology Group | *Bloomington, IL*
- Act as a primary point of contact to address technology and security issues of primary clients.
- Develop and implement powershell scripts to automate routine client tasks, including payroll, improving client workflow
- Provide critical backend support by maintaining client servers and backend systems.

Computer Science Education Research **June 2024 - August 2024**
Illinois Wesleyan University | *Bloomington, IL*
- Developed and implemented comprehensive course materials to enhance student understanding of machine learning concepts, including data preprocessing, linear regression, and logistic regression.
- Collaborated with faculty to identify and address challenging topics in the computer science curriculum, such as version control with Git, improving instructional clarity and student engagement.