Naveen Kamath

U.S. Citizen • kamath.62@osu.edu • Columbus, OH • (937) 829-1176 • kamaths.info • GitHub

EDUCATION

The Ohio State University - Main Campus | Columbus, OH

B.S. in Computer Science and Engineering | GPA: 3.5 | Minors: Biomedical Engineering & Mathematics May 2027
Relevant Courses: Computer Organization and Assembly Language, Data Structures and Algorithms, Object-Oriented

Programming, Digital Logic Design, Discrete Structures, Fundamentals of Engineering

TECHNICAL SKILLS

Programming Languages: Java, C, C#, Python, JavaScript, HTML, CSS, Dart, SQLite, RESTful API, Json, Assembly Frameworks: React.js, Flutter, Flask, Computer-Aided Design (CAD), OpenCV, PyTorch, NumPy, Pandas, Tailwind CSS Concepts: Machine Learning, Deep Learning, Object-Oriented Programming, Network Systems, Game Design Tools/Technologies: Git, GitHub, VS Code, Microsoft Office, Raspberry Pi Pico, Android Studio, Unity, Unreal Engine 5 TECHNICAL EXPERIENCE

Air Force Research Laboratory | Software Engineer Intern | Dayton, OH | GitHub | June 2025 - Present

• Contributed to the open-source ARES OS by building a Python-based RESTful API for external communication with microcontrollers and integrated C# backend logic to handle and parse incoming JSON messages

Ohio State Wexner Medical Center | Undergraduate Research Assistant | Columbus, OH Aug 2024 - May 2024

- Developed a mobile health application in Flutter to be used in a clinical trial on Gestational Diabetes
- Created features to log biometrics from Apple Health Kit to an encrypted SQLite database and OAuth 2.0
- Implemented an LSTM Deep Learning model analyzing 120,000+ CGM data points per participant; achieved 0.0002-0.0033 MSE (normalized) for 5-30 min glucose predictions

Air Force Research Laboratory | Software Engineer Intern | Dayton, OH

June 2024 - Aug 2024

- Developed a multiplayer touch screen application in Unreal Engine 5 for a research study used by 10 C-130 pilots
- Implemented game state management and system networks for seamless multiplayer functionality
- Analyzed 10+ CSV files with local outlier factor Machine Learning algorithm to determine the optimal flight time

Air Force Research Laboratory | Software Engineer Intern | Dayton, OH

June 2023 - Aug 2023

- Created a Mixed Reality elevated radial maze in Unity for a research study on the efficacy of a laser deterrent
- Developed 3 objectives (shooting targets, retrieving objects) and collected 2 biometrics (heart rate, pupil dilation)

PROJECTS

Comparative Study of Sequential Models on CGM Data | Personal Project | GitHub

July 2025

 Benchmarked LSTM, Transformer, and Mamba architectures for short-term glucose prediction using CGM and ECG data. Preprocessed multimodal time-series data for over 100,000 data points from the OHIOT1DM and D1NAMO

Degree Audit Parser | HackOH/IO 12 Project | GitHub

Oct 2024

- Led a team of four to develop a web app in React.js to present missing course details with responsive UI design
- Connected the backend to the frontend using Axios to handle API requests, integrating OSU Class Search API

Look2Type | Hack/AI 8 Project | GitHub

February 2024

- Developed a digital keyboard using webcam eye tracking, enabling users with locked in syndrome to type with eyes
- Preprocessed and annotated over 800 images to train a gaze direction prediction model in PyTorch achieving 0.7 bits of throughput enhancing prediction efficiency and responsiveness for real-time user interaction

LEADERSHIP EXPERIENCE

Chief Technology Officer/Founding Member | Lanarchy Club

Aug 2024 - Present

- Scaled the club from 0 to over 250 members in four months by creating a website and eye catching flyers
- Managed and planned 4 hour LAN parties with 40 participants and provided technical support to club members
- Engineered a bot leveraging Discord REST API and Google Sheets API to track club member statistics in real-time