Sahil Khunt

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EDUCATION

University of Illinois at Urbana-Champaign　　　　　　　　　　　　　　Champaign, IL
Bachelor of Science in Computer Science, Minor in Statistics, GPA: 3.82/4.00　　　*Expected May 2027*

Relevant Coursework: Multivariable Calculus, Discrete Structures, Physics (Mech, E&M)
Data Structures, Linear Algebra, Computer Architecture, Prob & Stat for CS, Statistics and Probability I

EXPERIENCE

Lead Web Developer　　　　　　　　　　　　　　　　　　　　　　May 2025 – Present
FiPet　　　　　　　　　　　　　　　　　　　　　　　　　　　　　*Remote*
- Leading development of FiPet's web platform using Next.js, Vercel and Tailwind CSS to deliver a fully responsive UI across desktop and mobile
- Managed and guided a team of software engineers, overseeing code reviews and providing guidance
- Collaborated closely with founders and design team to translate concepts into fully functional web features
- Oversaw technical hiring processes and directed onboarding for multiple engineering interns

Software Engineer　　　　　　　　　　　　　　　　　　　　　　Sept 2024 – Present
The Illinois Space Society　　　　　　　　　　　　　　　　　　　　*Urbana, IL*
- Collaborated with a graduate student to simulate neural network controllers for quadrotors
- Applied Lyapunov theory to ensure stability in nonlinear control systems
- Developed and implemented Kalman filters for accurate position tracking in rocket GNC systems

Lead 7-8 Teacher, Web Developer　　　　　　　　　　　　　　　Aug 2022 – May 2024
CompSci Kids　　　　　　　　　　　　　　　　　　　　　　　　*Schaumburg, IL*
- Designed and taught customized computer science curriculums for 30+ middle school students
- Led and managed a team of 10 volunteers for coordinated activities and student learning
- Conducted interactive Arduino sessions, guiding students through virtual and hands-on projects
- Maintained and updated the organization's website, ensuring accessibility for hundreds of parents
- Facilitated a passion for computer science by fostering creativity and problem-solving

PROJECTS

C.H.E.R | *Python, TensorFlow, React, Firebase, OpenCV*
- 1st place team at district-wide hackathon (Fremd Hacks) for creating an AI mental health tool
- Developed an AI model trained on 35,000+ images of human emotion, ensuring reliable classification
- Implemented real-time facial emotion detection using computer vision and deep learning
- Built to monitor emotional patterns and detect signs of declining mental health to alert a trusted adult

Task Manager App | *Swift, Xcode, Firebase*
- Developing a task management app featuring multi-user collaboration
- Implemented secure authentication with Google, Apple, and email sign-in, ensuring accessibility across platforms
- Designed and structured a thorough Firebase database to manage user tasks, authentication, and data synchronization across multiple users, ensuring data organization and app scalability

Webscrapers | *React, Firebase, Tailwind CSS*
- Founded a web development business, delivering customized websites with React and Firebase
- Redesigned a local nonprofit's website, increasing traffic and improving attendance at community events
- Recruited and mentored 2 junior developers, providing technical guidance and ensuring quality code production
- Developed proposals and pitched services to prospective clients, laying groundwork for continued expansion

TECHNICAL SKILLS

Languages: Java, Python, C++, JavaScript, R, Swift, HTML/CSS, Assembly (MIPS)
Frameworks: React, Next.js, React Native, Node.js, TensorFlow, Tailwind-UI
Developer Tools: Git/Github, Docker, VS Code, Xcode, Vite, Firebase, Google Cloud, Rest APIs
Libraries: pandas, NumPy, Matplotlib, OpenCV, Twilio