Sahil Khunt

skhunt125@gmail.com | linkedin.com/in/sahilkhunt | github.com/sahilkhunt08

EDUCATION

University of Illinois at Urbana-Champaign — Champaign, IL
Bachelor of Science in Computer Science — *Expected Graduation May 2027*

Relevant Coursework: Multivariable Calculus, Discrete Structures, Physics (Mech, E&M)
Spring 2025 Courses: Data Structures, Linear Algebra, Computer Architecture, Prob & Stat for CS

EXPERIENCE

Software Engineer — June 2023 – 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 Instructor — June 2023 – January 2024
Mathnasium — *Schaumburg, IL*

- Provided personalized math tutoring to k-12 students, enhancing fundamental mathematical skills
- Supplied customized learning plans based on skill levels and schoolwork
- Facilitated an engaging learning environment, led open discussions, and built students' confidence

Lead 7-8 Teacher, Web Dev — Aug 2022 – May 2024
CompSci Kids — *Schaumburg, IL*

- Developed and taught customized computer science curriculums for over 30 students
- Led and managed a team of 10 mentors for coordinated activities
- Ran interactive Arduino sessions, guided students through virtual and hands-on projects
- Assisted in the web development team
- 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)
- Artificial intelligence model trained on over 35,000 images of human emotion
- Uses computer vision to detect real-time emotions in subjects
- Built to detect signs of declining mental health and alert trusted adult

Task Manager App | *Swift, Xcode, Firebase*

- Developing first app featuring multi-user collaboration
- Implemented Google, Apple, and email authentication forms
- Designed and structured a thorough Firebase database to manage user tasks, authentication, and data synchronization across multiple users

WebScrapers | *React, Firebase, Tailwind CSS*

- Launched an online web development business
- Partnered with local nonprofit to redesign their website and promote community events
- Recruited and trained 2 students to assist with ongoing projects
- Actively working to build a client base

TECHNICAL SKILLS

Languages: Java, Python, C++, JavaScript, Swift, HTML/CSS, MIPS assembly
Frameworks: Node.js, React, React Native, TensorFlow, Tailwind-UI,
Developer Tools: Git, VS Code, Xcode, Firebase, Google Cloud Platform, PyCharm, IntelliJ, Vite
Libraries: pandas, NumPy, Matplotlib, OpenCV, Twilio