Soham Nandi

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Education

🎓 Bachelor of Science in Computer Science *Fall 2021 to Spring 2024*
University of Wisconsin–Milwaukee

Relevant Coursework

Machine Learning · Natural Language Processing · Cybersecurity · Object-Oriented Programming · Functional Programming · Agile Software Engineering · Operating Systems · Algorithms and Data Structures

Technical Skills

Java · C++ · Python (Django, Flask) · C · HTML, CSS · JavaScript, TypeScript (Angular, React) · Scala · Git, GitHub, GitLab · SQL (MySQL) · UNIX, Linux (BASH), PowerShell, Docker · LaTeX · Markdown · API programming · Python libraries (tensorflow, keras, matplotlib, scikit-learn) · shell scripting · and more...

Research Experience

AI research team member | Informatics Skunkworks, University of Wisconsin–Madison *Mar–May 2024*
Fine-tuned and optimized a generative ML model for the discovery of crystalline materials.

> Remotely participated in a materials engineering research team working with a generative ML model for discovery of new crystalline materials. Worked with the Python library keras to fine-tune and optimize a novel neural network model for the task.

Work Experience

Student instruction leader | University of Wisconsin–Milwaukee *Feb–May 2023*

> Tutored comp sci students in intermediate-level object-oriented programming using Java. Presented material to supplement coursework and held exam review sessions that dozens of students attended, leading to higher exam scores.

Technical Projects

- **Senior design project** *Jan–May 2023*

  "Best Senior Design Project" award from the College of Engineering

  Designed and built the Lifting Progress Tracker web app to monitor fitness activity.

  - Collaborated in a team of six students on frontend and backend software engineering, code testing, and debugging.
  - Designed and deployed a web app using Angular, Flask, and MySQL.
  - Worked on cross-platform functionality and UX integration between pages.
  - Awarded "best senior design project"

- **FIRST Robotics Competition** *2017-2021*

  Designed code for automation, including autonomous driving and vision processing, for four years of high school.

  - Led a group developing autonomous driving capabilities using C++.
  - Designed the code for camera vision processing with object detection with a simple GUI.
  - Trained new members in GitHub.

Leadership experience

IEEE Computer Society at UWM, President/Officer *2022-2024*

> Managed internal and external communications, marketing, and outreach, which led to increased engagement while I was president. Led events such as short demonstrations of computer skills for a general audience. Helped organize special events with hundreds of attendees.

Certifications

- CompTIA Security+ (*in progress*)

  Pursuing certification to gain proficiency in core cybersecurity concepts, including cryptographic solutions, change management, asset management, threat management and mitigation, cloud and IoT security architecture, security governance, compliance, and data protection.