Sam Kravitz (he/him)

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Education

Purdue University   West Lafayette, IN

▪ Bachelor of Science in Computer Science   May 2021

▪ Overall GPA: 3.60   Major GPA: 3.57

Experience

Applied Research Associates   Raleigh, NC

Software Engineer   June 2021 - Present

- Work on a variety of Augmented Reality software applications in C++ for custom hardware targets
- Implemented a location stomping feature that was presented to a customer at a progress demonstration
- Upgrade the API in an Android application to use a modern data source

Center for Innovation and Strategic Transformation of Alkaline Resources (CISTAR)   West Lafayette, IN

Software Engineering Intern   January 2020 - May 2021

- Solely maintained the frontend and backend for a web tool designed to inform chemists in the laboratory environment about safety hazards present in the experiments they conduct
- Worked closely with industry representatives and experts on how to calculate the properties of a chemical reaction and convey safety information in an accessible and visually appealing way

Projects

Discovery

- A Nintendo Game Boy Advance emulator written in C++
- Accurately emulates Game Boy Advance hardware systems, including CPU, GPU, MMU, & DMA
- Successfully boots and runs many commercial and homebrew Game Boy Advance ROMs

Maestro

- A hobby operating system kernel for the x86 architecture
- Features include preemptive multitasking, EXT2 filesystem, a PS/2 keyboard & mouse driver, and a C library

Works Published

Promoting a Safe Laboratory Environment Using the Reactive Hazard Evaluation and Analysis Tool

- A. Talpade, P. Ghanekar, S. Kravitz, et. al
- Published in the American Chemical Society's Health & Safety journal
- Published February 28, 2021

Skills

▪ Languages – C/C++, Java, JavaScript/TypeScript, Python R, HTML, CSS, C#, x86/ARM assembly

▪ Technologies – Git, React, Node.js, Express, Java SpringBoot, Firebase, Android Studio, AWS, .NET, MongoDB, SQL

▪ Operating Systems – GNU/Linux (Experienced), Windows (Intermediate), MacOS (Working knowledge)