Ian SooHoo

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EDUCATION

University of Illinois at Urbana-Champaign **START JAN 2023**

Master of Computer Science (MCS)

San Jose State University, CA **MAY 2021**

Bachelor of Science in Computer Science (BSCS) GPA: 3.50

Relevant coursework: Blockchain (**JavaScript** and **Go**), TensorFlow (on Anaconda), Advanced Python, Scala Functional Programming, Java Data Structures & Algorithms, Formal Languages, Cybersecurity, Compiler Design

HIGHLIGHTED EXPERIENCE

CK-12 // Interactives Software Development Intern **SUMMER 2019**

- Created **6 interactive math web apps** for 4 open-source online textbooks in **JavaScript** and GeoGebra Script.
- Analyzed feedback and recommended user experience changes for pre-existing web apps and site to CEO, with 92% acceptance.
- Researched and developed UX improvements for existing web apps to convey difficult math concepts to students

Upin // UX Engineer Intern **SUMMER 2018**

- Applied SCRUM process for 2-week sprints at a startup company developing a social media app.
- Created wireframes, user flows, logos, and over 20 UI concepts in Sketch App and Illustrator.
- Organized assets and sprints through Trello and Zeplin.

SKILLS

Languages: Python • Java • **JavaScript** • **GoLang** (familiar) • Scala (familiar) • HTML/CSS/**EJS**

Modules/Platforms: Flask • DataFrames • NumPY • Matplotlib • BeautifulSoup • NodeJS • MongoDB • **React** • Angular (learning) • **Git** • **AWS EC2 (Linux)**

HIGHLIGHTED PROJECTS

Pasttime – Post-COVID Activity Finder **2021**

- Lead a team of three and utilized **NodeJS** to build a webapp that pulls recreational activity information from **MongoDB**.
- Secured user information with **NPM Crypto** library and created a virtual currency.
- Utilized **EJS** templating, **Bootstrap** and **CSS Grid** to build a responsive front end

Opcode Machine Learning for HMM-based Metamorphic Virus Detection **2020**

- Developed opcode file processor in **Python 3** that analyzes **thousands of files in seconds** and generates a Hidden Markov Model (neural network) compatible output file.
- **Designed an algorithm** to tally the 30 most frequent opcodes in the folder family and truncate the remaining pool.
- Utilized **Python library NumPY, Python dictionaries**, and string manipulation to produce a clean output.

Responsive Diagram Webapp **2015-Present**

- Designed and created, with a team of 4, a web app that aids students in creating UML class diagrams.
- Utilized **JavaScript, HTML Canvas, and CSS** to create a responsive web design.
- Received positive feedback for its functionality and design. Utilized by students in Computer Science classes.