**Ian SooHoo**

A close up of a sign

Description automatically generatedA picture containing sky, saw

Description automatically generatedhello@iansoohoo.me github.com/capturetheworld [linkedin.com/in/iansoohoo/](https://www.linkedin.com/in/iansoohoo/) [IanSooHoo.me](http://iansoohoo.me/)

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| **University of Illinois at Urbana-Champaign**  Master of Computer Science (MCS) | **START JAN 2023** |
| **San Jose State University, CA**  Bachelor of Science in Computer Science (BSCS) | **MAY 2021** GPA: 3.50 |

EDUCATION

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

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| **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. | |

HIGHLIGHTED EXPERIENCE

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

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| **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

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| **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.

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| **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.