JACKWIN HUI

Active TS/SCI w/ FS Poly Clearance

✉ : jackwin@jackwinhui.com | 🌐 : jackwinhui.com | : github.com/jackwinhui

Highly driven and hardworking ***mid-level software engineer with an interest in cybersecurity-related technologies and software****. Proven communication and technical skills working in multiple team settings across the industry to create deliverables and solutions in support of and for government clients*

PROFESSIONAL WORK

MICROSOFT — Reston, VA

Software Engineer II — February 2025 – Present

- Developed software solutions for Microsoft's Cloud for Sovereignty (Sovereign Cloud Services) and assisted in porting over Microsoft commercial technologies in the Azure Cloud into spaces for government clients
- Created internal metric tools using Microsoft Web and REST APIs to assist in builds development and sprint planning, leading to improved efficiency within agile sprints as well as build version timelines

BOOZ ALLEN HAMILTON — Washington D.C.

CNO Analyst Programmer — January 2024 – January 2025

- Developed software products in an agile software development cycle, working with government clients and other developers in a scrum framework to research, design, implement, debug, and test features in preparation for regular software releases
- Facilitated biweekly sprint planning and sprint review meetings to iteratively and incrementally develop software features, prioritizing Jira tickets in the product backlog to meet customer priorities and needs, collaborating and adapting to any changes necessary
- Directed and improved system testing of multiple software releases through the creation and testing of requirements set by the concept of operations (CONOPS), software requirements specifications (SRS), and high level design (HLD) documents

CNO Researcher – DarkLabs Vulnerability Research Team // Directed Research — June 2023 – October 2023

- Conducted vulnerability research and analysis of target technologies as requested by the client, including research of mechanisms, mitigations, bypasses, and behaviors of applications and programs
- Co-authored and edited multiple research papers as a final deliverable to the client, compiling all research done over the span of four months into three digestible research papers totaling over 110 pages of content

DEPARTMENT OF DEFENSE – NATIONAL SECURITY AGENCY — Fort Meade, MD

Computer Science Intern – Center for Assured Software — May 2022 – August 2022

- Managed, updated, architected, and refactored code base of Perl and Python scripts used in the development of a software assurance automation system to be run against secure vendor software
- Ensured vendor software meets security requirements outlined in the Information Assurance Security Requirements Directive (IASRD) through the development of Python test cases, identifying over 20 vulnerabilities with lexical analysis
- Reviewed security requirement documents for software and hardware for existing technology implemented across the DOD

CORNELL UNIVERSITY — Ithaca, NY

Research Lab Assistant and Model Developer – Ruminant Farm Systems (RuFaS) Lab — April 2021 – June 2022

- RuFaS is a next-generation, whole-farm, dairy systems data simulation model focused on sustainable profits, productivity, and environmental health for US dairy systems through a modular, adaptable, open-source model for researchers and managers of real-world enterprises
- Maintained pseudocode documentation and clear, consistent, and well-documented code in Python, reviewing and debugging code and using clean working branches to maintain version control through Git
- Collaborated with a nation-wide team of programmers, scientists, and modelers on the RuFas model's development, identifying and proposing opportunities for model improvement

EDUCATIONAL

CORNELL UNIVERSITY, College of Engineering — Ithaca, NY

Bachelor of Science in Computer Science, Dyson Business Minor for Engineers — August 2019 – December 2022

SKILLS

Programming Languages	***Proficient:*** Python, Java, JavaScript, HTML/CSS ***Basic***: C, C++, C#, oCaml, SQL, Assembly, Swift
Software	Xcode, Git, Jira, Confluence, Vim, Wireshark, Photoshop, Illustrator, Microsoft Office, WordPress
Languages	English (Fluent), Mandarin (Proficient), Cantonese (Conversational)

PROJECTS

Sentiment Artificial Analysis (2020). Python-based application using NLP techniques of sentiment analysis, event extraction, and causal inference to connect and analyze user journal data entries with specific events and emotions

Snake (2021). Embedded systems program coded in assembly, C, and Python to control a game of Snake using a FRDM-KL25Z microcontroller board's accelerometer