

# BRIAN MAK

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## OBJECTIVE

Quick learning, team-player, organized, and driven computer science major at UC Santa Cruz seeking a software engineering internship position.

## EDUCATION

### COMPUTER SCIENCE, B.S., TECHNOLOGY AND INFORMATION MANAGEMENT MINOR

UNIVERSITY OF CALIFORNIA, SANTA CRUZ – EXPECTED GRADUATION DATE: MAR 2024

- GPA: 3.98, 6x Dean's Honors List – Fall 2020 to Spring 2022
- Relevant Courses: Introduction to Data Structures and Algorithms, Advanced Programming, Computer Systems and C Programming, Computer Systems and Assembly Language, Computer Architecture, Programming Abstractions: Python, Applied Discrete Mathematics

## PROGRAMMING LANGUAGES, FRAMEWORKS/LIBRARIES, AND SKILLS

- |                      |                      |                               |
|----------------------|----------------------|-------------------------------|
| • C/C++ - Proficient | • C#/.NET - Familiar | • JavaScript/React - Familiar |
| • Lua - Proficient   | • Java - Familiar    | • Application/Web Development |

## WORK EXPERIENCE, PROJECTS, AND AWARDS

### SOFTWARE ENGINEERING INTERN, PLATFORMS (TIMING)

JUNIPER NETWORKS, JUN 2022 – SEP 2022

- Designed and implemented a history library to track IEEE 1588 Precision Time Protocol state changes, allowing engineers and testers to troubleshoot errors and debug code more efficiently.
- Implemented software debug features for an FPGA implementing IEEE 1588 Precision Time Protocol clocks, allowing engineers and testers to effectively debug packets discarded by the FPGA.
- Placed second place in a company CTF challenge with reverse engineering and web exploitation.

### NSA CODEBREAKER CHALLENGE: 2021 HIGH PERFORMER, 2022 SOLVER

JAN 2022, AUG 2022

- 2021: Completed seven tasks covering network forensics, log analysis, email analysis, PowerShell, registry analysis, Docker analysis, reverse engineering, cryptanalysis, and protocol analysis.
- 2022: Completed nine tasks covering log analysis, network forensics, reverse engineering, web hacking, and cryptanalysis.

### GROUP TUTOR – COMPUTER SYSTEMS AND ASSEMBLY LANGUAGE

UNIVERSITY OF CALIFORNIA, SANTA CRUZ, MAR 2021 – JUN 2022 (SPRING – FALL 2021, SPRING 2022)

- Tutored over 175 students on assignments covering Git, logic circuits, and MIPS and RISC-V assembly.
- Helped over 60 students study and prepare for quizzes and exams.

### GROUP TUTOR – COMPUTER SYSTEMS AND C PROGRAMMING

UNIVERSITY OF CALIFORNIA, SANTA CRUZ, SEP 2021 – MAR 2022 (FALL 2021, WINTER 2022)

- Tutored over 150 students on programming assignments covering C programming with data structures, sorting algorithms, Huffman coding, and RSA key generation, encryption, and decryption.

### PROGRAMMER'S CALCULATOR

JUN 2021 – JUL 2021

- A programmer's calculator created using React, and the software framework, Electron.
- Contains the ability to perform bitwise operations and convert decimal to other bases.