ANDREW B. MOORE

(415) 745-7865　•　abmoore3@dons.usfca.edu　•　www.blakeslee.me　•　San Francisco, CA

Education

University of San Francisco
Bachelor of Science (B.S.), Computer Science

San Francisco, CA
08/2020 - Present

Work Experience

University of San Francisco
San Francisco, CA

Research Assistant　05/2023 - Present

Department of Computer Science - Human Computer Interaction Lab

- Credentialed in Human Subjects Research, in order to ensure ethical practices in-line with regulations.
- Built a study-related app with Swift and SwiftUI to power investigation of perception shifts.
- Investigated impact of virtual reality environments' fidelity on emotional and psychological perception.
- Ensured compliance with ethical guidelines and data privacy regulations when collecting sensitive information.

Assistant System Administrator　05/2022 - Present

Department of Computer Science - Systems Support

- Redesigned system imaging process, simplifying the end-user experience, patching multiple critical security vulnerabilities.
- Built a custom imaging system for novel RISC-V single-board computers, making new systems compatible with existing x86 systems.
- Built a custom SSH load-balancer for single-board lab systems, leveraging historic user data to intelligently allocate resources to students, significantly increasing capacity per machine (vs allowing students to pick a machine themselves).
- Tasked with designing an AWS-like micro-cloud, for use by academic community, allowing creation of Virtual Machines on-demand, powered by a cluster of roughly 50 machines.
- Actively provides support to students, staff, and faculty members of the Department and greater College of Arts and Sciences; multiple times requested by College deans, and other high-level University officials.

Teaching Assistant　08/2022 - 05/2023

Department of Computer Science - Introduction to Computer Science I

- Graded work of 20-30 students on a near-daily basis.
- Held office hours at least twice weekly.
- Supported struggling students, with an average 5%+ increase in their course grade; students' understanding of programming concepts consistently improved; provided encouragement and support to these students, often bettering their perception of computer science.
- Fall Section's performance and quality of work was objectively better, a sample of these students reported feeling better prepared for the following course (CS-112) than others from the same professor.
- Spring Section's performance (with a different professor) was in-line with historic above-average curve; worked to encourage and emotionally support students from historically-marginalized groups; worked in a team with a highly-regarded professor.

Student Technician　08/2021 - 05/2022

Information Technology Services - Help Desk and Field Support

- Ranked #1 of student employees in client satisfaction within two weeks at Help Desk.
- Provided out-of-the-box support to the entire University community where ITS historically would not; advocated for Office of Marketing and Communications' need for specific Adobe features, convincing Level 3 management to provide support.
- Noted and diagnosed several network issues, helped to solve a months-long investigation into critical issues in macOS's interaction with University WiFi 6 (801.11 AX) infrastructure.
- Made several (now implemented) suggestions in how to improve client experience with University systems.
- Ensured clients understood the problems they faced, and how to self-troubleshoot in the future if necessary.
- Collaborated and remained in constant communication with a team of 15+ members.
- Deployed Dell PCs and Macs to the University community; wrote several accessory scripts to speed up and automate previously manual tasks.

MOORE Toys & Gadgets, Inc.
Wheaton, IL

Lead Information Officer　2018 - Present

- Rebuilt website with a focus on human-centric design (ease of use, smooth (but simple) animations, accessible color schemes); completed within a 24-hour sprint.
- Led an emergency rapid and high-pressure conversion from Lightspeed POS to Square retail, on retail's highest-revenue day of the year (Saturday before Christmas), with no measurable loss in revenue over previous year.
- Led integration of Online sales channels at onset of COVID-19 shutdowns, enabling curbside pickup, local delivery, and distance shipping, led to revenue greater than industry averages in April 2020.
- Implemented Zero-Trust system architecture, with an emphasis on ease of use, designed for non-technical users; leveraged on-device biometrics and FIDO keys to simplify on-premises access; built an authentication proxy system.

Projects

Nerva
2023 - Present

Personal Project — Health Application for iOS and Apple Watch (In-Progress)

- With Swift and SwiftUI, building a biometric-based application for the proactive detection and notification of heightened anxiety and other mental health episodes.
- Using human-centric design principles to create an inviting, calming experience for user, with the goal of increasing engagement and habitual use (as is difficult to accomplish with certain mental health disorders).
- Leverages biometric data collected by Apple Watch (HealthKit) in conjunction with a multi-parameter Machine Learning (Core ML) algorithm to enable accurate and personalized on-device detection, opposed to static algorithms used by existing applications.

Search Engine
2023

University of San Francisco, Software Development (CS-272)

- In Java, built a full-stack, in-memory, mulithreaded web-crawler and search engine.
- Experienced with advanced programming topics, including: inheritance and polymorphism, multithreaded programming, networking, database programming, SQL, and web development/design (including with Bootstrap).
- Learned techniques for designing, debugging, refactoring, and reviewing code.

Tic-Tac-Toe AI
2022

University of San Francisco, C and Systems Programming (CS-221)

- In C, built an unbeatable Tic-Tac-Toe-playing Artificial Intelligence system.
- Learned basics of game theory and Artificial Intelligence.
- Used the Minimax decision rule to determine the computer's best possible next move.

Mini-Slack
2022

University of San Francisco, C and Systems Programming (CS-221)

- In C, built a command-line and distributed-network chat application.
- Supported @user tagging and #channel tagging, allowing any online user to be tagged.
- Used TCP and UDP sockets to build both Client and Server applications.

Movie Wall
2022

University of San Francisco, Data Structures & Algorithms (CS-245)

- In Java, built an IMDb-like "movie wall," containing over 5000 entries of open-source data (ingested as JSON).
- Used quick-sort and binary search to find cast/crew for a movie, or returned the nearest match.

Notable Extracurriculars

USF Association for Computing Machinery (USF-ACM)
San Francisco, CA

Executive Officer and Director — University and Internal Affairs
01/2023 - Present

- Handled communication with Department of Computer Science staff and faculty, greater University, and other student groups.
- Created and led USF-ACM's weekly flagship event, Cookies & Code, a social event for the USF Computer Science community; handled related bureaucratic tasks.
- Took on several additional responsibilities when other Officers were unable, including graphic design and advertising efforts, leading development of USF-ACM's web tech platform, and served as interim treasurer while seat was vacant.
- Co-wrote Association's constitution, ensuring accordance and compliance with University and Greater ACM guidelines.
- Constantly communicated with executives of other CS Department organizations and officials, ensuring no overlap and non-competition of scheduled events.
- Handled multiple diplomatic emergencies, once salvaged reputation with Department staff and faculty.

Skills

User Interface Design · User Experience Design and Engineering · Implicit User Interfaces · Accessible Design · Data Modeling and Analysis · Teaching/Educating · Writing · Communication · Public Speaking/Presentation · Interpersonal Communication · Small Business Technology and Administration · Scientific Research · Xcode · JetBrains IDEs · Programming · Python · Java · C (Programming Language) · Rust · Swift · SwiftUI · Unity · C# · OpenStack · Linux · macOS · Windows · iOS · iPadOS · watchOS · tvOS · Ubiquiti UniFi · Networking · System Architecture · Cloud Computing · Pattern Recognition · Clinical Practices (Psychology) · Conflict Resolution and Diffusion · Constant Learner