Hongwei (Vincent) Cai
he/him/his

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**A detail-oriented Computer Science student, seeking a Software Engineer internship to apply and enhance my technical skills.
Open to remote or on-site positions, eligible for CPT/OPT, and eager to contribute to the growth of the company.**

EDUCATION

MCS, Computer Science | University of Iowa | Iowa City, IA | Anticipated May 2025
- With a Software Engineering subtrack

Relevant Coursework: Data Structures, Algorithms, Computer Organization, Operating System, | GPA: 4.00/4.00
Programming Language Concept, Design and Implementation of Algorithms

Ph.D., Composition | University of Iowa | Iowa City, IA | Anticipated Dec 2023
- Awarded Marcus Bach Fellowship, for outstanding doctoral dissertation | GPA: 3.77/4.00
- Awarded Henry and Parker Pelzer Fellowship Award (×2)

EXPERIENCE

Teaching Assistant | Computer Science Department | University of Iowa | Iowa City, IA | Jan 2023 – May 2023
- Led two weekly lab sessions for CS:2630 Computer Organization for 30+ students in active problem solving
- Instructed C programming, Bash, assembly language programing, X86 ISA, memory management, and CPU pipelining
- Established open communication via office hours, email, and resolved issues in collaboration with fellow TA

PROJECTS

FoodShareConnect | HACKUIOWA Project | Python, Django, JavaScript, ReactJS, HTML, CSS, MariaDB, Git | Sep 2023
- Managed front-end development, collaborated seamlessly with back-end teammates for seamless integration
- Facilitated effective communication, driving efficient issue resolution, idea sharing, and timely project delivery
- Utilized GitHub for version control, fostering a collaborative development environment

Combination Tone Generator | Python, Flask, JavaScript, HTML, CSS, PyCharm, Git | Aug 2023
- Implemented input validation for error reduction and enhanced tool reliability
- Designed a user-friendly responsive interface with CSS adaptable to various screen sizes
- Developed an efficient note frequency caching mechanism for improved responsiveness

Website Building and Design | HTML, CSS, JavaScript, jQuery, VS Code, Front-end Design, Git | Jul 2023
- Rebuilt personal website from scratch, refining HTML, CSS and JavaScript skills for a engaging user experience
- Created a user-centric, responsive interface with adaptable CSS for seamless browsing on different screen sizes
- Improved website's SEO, increasing search engine visibility and organic traffic

Build ARM Processor | Logisim, Python, Bash, Linux, GitLab | Apr 2022
- Designed a complex digital system, adding new instructions to the datapath and control during implementation
- Applied combinational logic to build ARM processor components in Logisim and created Python test programs
- Employed robust testing methodologies for digital logic design, ensuring accuracy and reliability

HONORS & AWARDS

Marcus Bach Graduate Fellowship | University of Iowa College of Liberal Arts and Sciences | Sep 2023
- Awarded $10,500 for promoting intercultural communication and understanding of diverse religious perspectives

Graduate College Summer Fellowship | University of Iowa Graduate Collage | Jun 2021
- Awarded $5,000 to support summer research

Henry and Parker Pelzer Fellowship Award (×2) | University of Iowa Graduate Collage | Apr 2017 & Apr 2019
- Awarded $10,000 to one outstanding composer each year

SKILLS

Technical Skills: Python, C/C++, JavaScript, Java, Haskell, HTML5/CSS3, SQL, Git/GitHub, Linux, AWS

CAMPUS INVOLVMENT

- 2023 HACKUIOWA, the University of Iowa Hackathon | Sep 2023
- Provided support to 100 new Teaching Assistants during the Q&A session of the New TA Orientation | Aug 2023

WORKSHOPS

- Introduction to HPC using Argon Cluster | Jul 2023
- Cloud Computing Workshop Series (AWS) | Jun 2023 – Jul 2023