

# Crystal Chiu

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## EDUCATION

**University of California, Irvine**  
*Bachelor of Science in Computer Science*

Irvine, CA  
*Grad. March 2025*

## EXPERIENCE

### Software Developer

Mar. 2023 - Dec. 2024

*UCI Student Affairs IT*

*Irvine, CA*

- Contributed to full-stack applications serving 10K+ students and staff, using AGILE practices and test-driven development (TDD) to consistently deliver high-priority features on tight quarterly deadlines
- Mentored new developers on large legacy codebases (e.g., UCI Commencement App), sharing knowledge on unfamiliar technologies, and maintained onboarding documentation
- Collaborated with supervisor during summer planning for large-scale projects by collaborating with stakeholders, presenting mockups, and translating high-level designs into tickets for the student team
- Designed and optimized MySQL databases with 100K+ records to support vertical scaling, enforce data normalization, and improve query performance by several seconds

### STEM Tutor

Aug. 2021 - Jun. 2022

*Mt. SAC ACCESS Tech Center*

*Walnut, CA*

- Tutored students with disabilities in CS, Math, Physics, Writing, and Computer Literacy using personalized lessons and review sessions—resulting in a 100% pass rate for all returning students
- Troubleshoot and resolved technical issues with lab equipment and software for both students and staff

## PROJECTS

### Popmart Restock Monitor | *Javascript (Node.js), Cheerio, MongoDB*

- Developed and deployed a web scraper on AWS EC2 using PM2 to track Popmart's "Labubu" product restocks, sending real-time Discord alerts to assist users in purchasing high-demand items with unpredictable availability
- Implemented robust error handling and stealth features to manage network failures, page errors, and navigation without data loss or scraper crashes
- Optimized Puppeteer scraping of JavaScript-heavy content, reducing page load and scrape time from 20s to 5s per page

### Movie Catalogue Website & Android App | *Java, Maven, Apache Tomcat, MySQL*

- Co-developed and deployed a web and Android app managing several GB of movie data, enabling users to upload, search (by genre/title), view, and simulate purchases
- Wrote an efficient data import script to parse large XML files and upload clean data to the production MySQL database in under 10 minutes
- Implemented CAPTCHA, secure authentication, session tracking, connection pooling, and load balancing across 2 Micro EC2 instances for seamless traffic flow and improved personalization

## TECHNICAL SKILLS

**Languages:** Java, C++, Python, PHP, JavaScript, HTML/CSS, SQL (MySQL, Postgres, SQL++)

**Frameworks:** Vue.js, Node.js, Bootstrap, Flask, Laravel, Testing (PHPUnit, Cypress)

**Developer & Workflow Tools:** Git/Github, Docker, AWS, Visual Studio, Eclipse, IntelliJ, Jira, Figma, AirTable

**Specialty Domains:** AI/ML (Supervised, Reinforcement Learning), Computer Graphics, Health Informatics

## EXTRACURRICULARS

### Secretary, Forensic Science Club

July 2023 - June 2024

*UCI*

*Irvine, CA*

- Maintained comprehensive records for meetings, members, and events; developed a full-stack Flask + SQLite app to streamline data management and improve organizational efficiency
- Coordinated logistics for room bookings, fundraising events, setup/cleanup, and off-campus educational trips

### Tech Lead, Google Developer Students Club (GDSC)

Jan. 2020 - May 2021

*Mt. SAC*

*Walnut, CA*

- Led and organized tech talks, coding workshops, and hackathons; mentored peers and provided technical guidance for the Google Solution Challenge, supporting a community of ~100 members.