

SUMMARY

As a student at UC San Diego majoring in Computer Science and minoring in Urban Studies and Planning, I am passionate about leveraging data to drive smarter decisions in business and urban systems. With experience in building data pipelines, automating reports, and applying geospatial and statistical analysis to real-world planning and operations, I am eager to expand my expertise and help build the next generation of data-driven systems.

TECHNICAL SKILLS

Programming Languages: Python, SQL, C/C++, Java, JavaScript, PHP, HTML/CSS, Verilog, MATLAB

Tools and Frameworks: ArcGIS, AWS Lambda, Node.js, Express, React, Bootstrap, Git, Jest, Jira, Figma, ServiceNow

Core Competencies: Agile/Scrum, DevOps, Data Analysis, System Integration, User-Centered Design, Geospatial Analysis

EDUCATION

University of California San Diego

September 2022 - June 2026

Bachelor's of Science, Computer Science

Minor: Urban Studies and Planning

Relevant Coursework: *Data Science in Practice, Intro to Business Analytics, Data Structures, GIS for Urban and Community Planning, Computer Organization and Architecture, Systems Programming, Software Engineering, UI/UX Design, Design and Analysis of Algorithms, Discrete Math, Calculus and Linear Algebra, Digital Systems, Networked Systems, AI Reasoning*

Haileybury & Imperial Service College

September 2020 - June 2022

International Baccalaureate (IB) Programme

Higher level focus: *Computer Science, Economics, Design & Technology*

RELEVANT EXPERIENCE

Student GIS and Business Analyst

Operations Management and Capital Programs, UC San Diego

June 2025 - Present

- Built and maintained authoritative GIS datasets for Clery Act geography and emergency assembly areas to support regulatory compliance and campus safety planning across 900 university buildings
- Improved parking inventory and sensor data accuracy by validating data against on-site observations and floor plans, correcting coordinate misalignment, incorrect floor attribution, and duplicated sensor records
- Connected facilities data from IBM TRIRIGA with GIS layers to support planning work around campus assets, space usage, and capital projects
- Built ArcGIS Enterprise maps and StoryMaps, including a public-facing Stuart Collection guide, to communicate spatial information through clear, user-friendly interfaces for both internal teams and campus visitors

Student Application Development and Integrations Engineer

IT Services, UC San Diego

July 2025 - Present

- Deployed a serverless data pipeline (using AWS Lambda, S3, and RDS Postgres) ingesting high-frequency parking data from multiple vendor APIs, creating a centralized operations data lake
- Designed and implemented relational schemas supporting historical and real-time analysis of occupancy by location, floor, and parking eligibility category
- Built automated XML and JSON data feeds powering UC San Diego's digital signage and mobile app, delivering live parking availability information to 33,000+ daily drivers
- Improved reliability of live parking availability data by identifying erroneous vendor assumptions and correcting data inconsistencies in production feeds

Student Business Systems Analyst

Transportation Services, UC San Diego

July 2024 - June 2025

- Built and optimized complex SQL queries and Python scripts to support operational reporting, reducing manual processes and enabling data-driven decisions

- Automated transit benefit eligibility checks, saving over \$50,000 annually by identifying ~6% ineligible users and eliminating overpayments
- Maintained secure, automated file transfers between platforms, reducing erroneous parking citations by over 1,000 per month
- Led the implementation of a digital tire chalking system using LPR, reducing enforcement time by 80% and eliminating manual steps

Service Desk Technician

IT Services, UC San Diego

August 2024 - November 2024

- Delivered first-line technical support for network, account, hardware, and software issues to faculty, staff, and students across UC San Diego and UC San Diego Health
- Demonstrated proficiency with advanced tools including Cisco Identity Services Engine (ISE), DNA Center (DNAC), and Duo Security, Hostmaint, and UCSD IT Tools for efficient account management and network troubleshooting

Student Assistant

Transportation Services, UC San Diego

April 2023 - July 2024

- Assisted community members with logistics, payments, mobile app troubleshooting, and EV program inquiries
- Streamlined workflows by designing public-facing forms and improving internal documentation
- Gained experience in customer support and service operations in a high-volume environment

Team Lead

Commit Developer Journal Web App

April 2024 - June 2024

- Led a 13-member Agile team to build "Commit," a full-featured CRUD web app for tracking developer progress, tasks, and goals
- Managed the full software development lifecycle: requirements gathering, UI/UX prototyping, implementation, testing, and delivery
- Introduced markdown-based journaling, calendar scheduling, and task linking to enhance user workflow
- Oversaw GitHub-based version control, code reviews, and sprint retrospectives to ensure quality and delivery

Web Developer Intern

The FedR8tion

July 2022 - August 2022

- Rebuilt the company website using Laravel PHP and Tailwind CSS to align with the company's rebranding efforts
- Produced templates and implemented automated email workflows
- Collaborated with the team to meet project goals following Agile framework
- Gained practical experience in frontend development, project management, and team communication

Co-founder

Haileybury Computer Science Society

September 2021 - March 2022

- Co-founded the school's Computer Science Society, organizing scheduling and marketing of events
- Led weekly meetings to engage students of all years in programming, robotics, and problem-solving activities
- Shared insights and fostered interest in computer science among students
- Improved problem-solving skills through instructing others

Solo Web Developer

Haileybury Homework Portal

May 2021 - March 2022

- Designed and developed a full-stack homework management portal to digitize the school's physical planners and streamline assignment communication between students and teachers
- Created low-fidelity and high-fidelity mockups using Figma to prototype user flows and interface layouts before implementation
- Implemented user roles, assignment tracking, and messaging features using HTML/CSS, JavaScript, and PHP
- Conducted stakeholder interviews with faculty and students to refine functionality and align branding with school standards