Daniel Ching

Software Developer

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WORK EXPERIENCE

DoC Mapping LLC   **November 2021 – September 2023**

Junior Software Developer - Part-time   *San Diego, CA*

- o Spearheaded development of client deliverables generator through SDLC with **Electron, React** & Context API, SCSS, **MongoDB**, reducing turnaround time for sites by over 20%
- o Automated generation of PDFs, CSVs, XLSXs and DOCXs with exceljs, docxtemplater, jsPDF to accelerate processing workflow and accommodate 50+ clients
- o Structured HTML canvas functions and classes for annotated photographs and cross-sectional data views to enhance quality of deliverables
- o Continuously iterated on processors' feedback and requests using Trello to prioritize requirements
- o Scraped old deliverables with Google Drive APIs to populate MongoDB with 8+ years of archives
- o Modified and developed REST API endpoints with **Express.js** for central data portal use
- o Deployed Delauney triangulation to generate gouraud shaded bathymetric meshes, reducing dependence on third-party software and eliminating tedious workflows

Software Developer Intern   **June 2021 – November 2021**

- o Implemented features and addressed production bugs for in-house **Python** data processing software, simplifying workflows and reducing processing time
- o Enhanced UI/UX with tkinter and pygame, reducing onboarding time for new processors
- o Devised algorithm to sort by connected paths in place of linear sort, increasing scope of workable sites
- o Refactored, reorganized, and documented code base for reusability and scalability

PROJECTS

Sushi Go - Online multiplayer card game   **July 2023**

- Real-time multiplayer card game built with MERN stack and socket.io in **TypeScript**
- Validation of requests and input for fair and secure gameplay
- Features include JWT authentication, synchronous gameplay, persistent connections, private lobbies, and more

Music Library   **August 2023**

- JavaFX application coupled with MySQL database to create, view, and modify collections of songs and playlists

EDUCATION

Cal Poly San Luis Obispo   **July 2023 - Expected June 2025**

Bachelor's of Science in Computer Science, 4.0/4.0   *San Luis Obispo, CA*

- Relevant coursework: Intro to Database Systems (SQL)

Foothill College   **July 2023**

Computer Science, 4.0/4.0   *San Diego, CA*

- Relevant coursework: Adv Data Structures/Algorithms in Python, Adv Data Structures/Algorithms in Java

San Diego Mesa College   **June 2023**

Computer Science, 3.8/4.0   *San Diego, CA*

- Relevant coursework: Discrete Math, Computer Org and Assembly Language, C/C++ Programming, E&M

TECHNICAL SKILLS

- **Languages:** Python, JavaScript/HTML/CSS, TypeScript, Java, C++
- **Frameworks and Libraries:** React.js, Node.js, Electron.js, Express.js, Sass/SCSS, exceljs, docxtemplater, jsPDF, pandas, numpy, tkinter, matplotlib, pygame, VDatum, pyproj, JavaFX
- **Tools:** Git, Linux, SQL, MongoDB, Unix, Mathematica, XML, Assembly, Trello