

# Daniel Binoy

[www.binoy.co](http://www.binoy.co)

## Skills

<b>Programming</b>	Python 2/3, PyTest, Bash, JavaScript, Flask, Pandas, React, Node.js, ExpressJS, C/C++
<b>Systems &amp; Tools</b>	Linux/Unix, MySQL, Elasticsearch, Redis, AWS, Docker, Git/Github, Jupyter, REST APIs
<b>Other</b>	Agile, SDL, JIRA, System Design, UI/UX Design, Figma, Security, CAD, AI, Data Analysis

## Experience

### Software Engineer 2 (Full Stack) | Badger Meter Dec 2024 – Present

- Resolved structural issues in core data systems, saving **thousands of tech-support and developer hours**
- Driving **major architectural changes** to resolve data-integrity and scalability issues
- Analyzing user stories, mentoring junior developers, and coordinating with product owners/customers

### Software Engineer 1 (Full Stack) | Badger Meter Feb 2022 – Dec 2024

- Developed new Data Exchange (DE2) UI with **React, Redux Toolkit**, and various frontend libraries
- Improved **Python 3 backend** processing time by **84%** in time series calculation phase
- Created **automated Flask microservice** with **REST API** to resolve data syncing errors between **ES and MySQL**
- Wrote functional, testable, and well-documented code while maintaining a **data-driven approach**

### Software Engineering Intern | Badger Meter Jan 2021 – Sep 2021

- Completed various **JIRA** tickets in large **AGILE** teams, primarily in **Python** with **Elasticsearch**
- Prototyped new logging service (**Cloudwatch Events** → **AWS Python Lambda** → **ES Datastreams**)
- Logging service now handles **millions of logs daily** with little to no downtime
- Implemented “paperless billing” filter in **BEACON**, **saving large customers \$200k+** in print/mail costs

### ICSSC Project Lead | UCI ICS Student Council Nov 2020 – Dec 2021

- Migrated **Zotistics** (**5k UVPM, 30k hits/month**) website to Flask/React
- Pitched and implemented new multi-search, search tab, and canonical URLs in React frontend

### Computer Science Instructor | KTBYTE Apr 2020 – Jan 2022

- Created custom coding problem sets and taught CS principles in **Processing** and **Java** to **100+** students

### Web Development/UX Intern | Curicular Sep 2020 – Dec 2020

- Streamlined **Curicular's** website interface, resulting in **4x faster load times** and **positive user feedback**

## Education

### University of California, Irvine Sep 2019 – Dec 2021

BS, Computer Science, 3.7 GPA

## Relevant Projects

### 3D Object Reconstruction [binoy-d.github.io/object-reconstruction](https://binoy-d.github.io/object-reconstruction)

- Processed structured light scanning data to create **accurate 3D reconstruction** using **Python/numpy**
- Handled **camera calibration, Delaunay triangulation, mesh smoothing, Poisson reconstruction**
- Assembled partial 3D point clouds in **Meshlab** and used **Blender** for post processing

### UCI Web Search Engine [Private Github\(email for access\)](#)

- Built web crawler, indexer, database (inverted index), and command line interface in **Python**
- Achieved average query response time **under 300 ms** across **tens of thousands of documents**

### Portfolio Website [binoy.co](http://binoy.co)

- Created a responsive personal portfolio website using **React, Bootstrap, HTML, JavaScript**, and **CSS**
- Features consistent and smooth interface, light/dark mode, and **user interaction through state management**

## Certifications

### LinkedIn [Scrum, Python, Java, Python Automation, React.js, etc.](#)

## Technical Awards

### Badger Meter [Technical Achievement Winner | Time Series Data Management](#)

### SJSU MESA [2nd Place | National Engineering Design Challenge](#)

### Silicon Valley Coders Club [1st Place | Solar Panel Cleaning Robot](#)