Aidan Barbieux

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Education

California Polytechnic State University - San Luis Obispo
BS: Computer Science, 3.58 GPA

– Software Engineering:	CSC 307	– Juggling Club:	Outreach
– Algorithms:	CSC 202, 349	– Cycling Team:	Road Racing
– Computer Engineering:	CPE 225, 315, 357	– Unicycling Club:	Vice President
– Computer Science:	CSC 203, 348, 430	– Ceramics:	Crafter & Instructor

Languages

Java	●●●●○
Python	●●●○○
ReactJS	●●●○○
SQL	●●●○○
NodeJS	●●○○○
HTML 5	●●○○○
CSS	●●○○○
C	●●○○○
	●●○○○

Programs

VSCode	●●●●○
Git, Github	●●●●○
Unix, WSL	●●●●○
Adobe Suite	●●●○○
PostgreSQL	●●○○○
Jira	●●○○○
Digital Ocean	●●○○○

Other

Ceramics	●●●●●
Photography	●●●●○
Leadership	●●●●○
Writing	●●●●○
Juggling	●●●○○
French	●●●○○

Experience

IFixit Ad Server — September 2020 – Present
<u>Team Lead</u> – San Luis Obispo, CA
- Lead and mentors a team of four students in developing a **three-tiered web program**
- Develop a **backend REST API** using **NodeJS/Express**, and a **frontend** ad displayer and creator using **ReactJS**
- Manage virtual meetings and plans development sprints using **Jira**, all within a **SCRUM** framework

Corporate and Academic Hackathon — September 2018
<u>Awardee</u> - Santa Barbara, CA **~2.5k LOC Project**
- Led an active group in a 12hr hackathon and subsequent project
- Developed a biometric password system identifying users with ~80% accuracy based on typing patterns
- Managed a **Java** front and back end utilizing the **Processing API** and **Git/GitHub**
- Awarded for the best use of data and algorithms by corporate sponsors and mentors

UCSB IGERT Network Science — Summer 2017
<u>Research Intern</u> - Santa Barbara, CA **~2k LOC Project**
- Studied general network science and graph theory under by two Computer Science PhD students
- Visualized data from Kaggle of over 1,500 plane crashes with cluster graphs via Python in Jupyter Notebook
- Worked full time for six weeks heading my three-person team, using Git/GitHub for program management

Non-Technical Work

VeloPro Cyclery — Summer 2019 - Present
<u>Sales Associate</u> - Santa Barbara, CA
- Service and sell bicycles; generated a total profit of over $45,000 for the holiday season
- Resolve customer service issues including warranty claims and special orders
- Train new employees and customers in bike service and maintenance

Unicycling and Juggling Club — December 2018-Present
<u>Vice President</u> - San Luis Obispo, CA
- Reserve spaces and organize events around San Luis Obispo to teach and practice
- Recruit and motivate new members to be active in the juggling and unicycling community
- Practice and perform routines with groups of 3-10 people for parades and events such as TedX

Projects

Portfolio and Personal Website — June 2020-Present
<u>ReactJS</u> - *barbieux.dev* **~6K LOC Project**
- Display a mobile friendly web interface via ReactJS and Bootstrap, organizing information about and for me
- Host a REST API via NodeJS, Express, PostgreSQL, and NGINX to manage and send emails and notes
- Dynamically generate menus, image galleries, and other content from JSON files and directories

GPX 3D Visualizer and Fractal Explorer — June 2019-January 2020
<u>Java</u> - *github/Mandelbrot* - *github/gpxVis* **~2K LOC Project**
- Utilized **OpenGL** and the **Processing API** to display cycling race and event routes
- Implemented and optimized a generator and renderer for Fractals using the **Processing API** and **ImageMagick**
- Designed user controls to generate and interact with both projects in real time