NATALIE WAGNER

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EDUCATION

California Polytechnic State University, San Luis Obispo   Graduated March 2019
    Bachelor of Science in **Computer Science**

EMPLOYMENT HISTORY

Bishop Peak Technology/Icomera US. Software Engineer 1. San Luis Obispo, CA   June 2018 - May 2020
- Intern converted to full time at Bishop Peak Technology/Icomera US, working on transit management software
- Acted as the sole front end web developer to replace legacy PHP components with newer Backbone.js components, improving maintainability and performance
- Built a React website to display bus routes and schedules to transit riders. Utilized MaterialUI to style the webpage and i18next to add language localization for our non-English-speaking international customers
- Added a timetable feature to one of our products so that transit hubs can display departure data to riders and automatically announce bus/train arrivals and departures
- Worked in both AGILE and KANBAN workflows
- Used jQuery DataTables and Google Maps API
- Interviewed candidates and participated in recruiting efforts

Arka Incorporated. Software Developer Intern. San Francisco, CA   June 2017 - September 2017
- Worked on web app refactor, eliminating redundancy while improving maintainability, readability, and performance
- Utilized Cloudinary to allow users to upload images and Mailgun to fire internal emails with customer information
- Restructured MongoDB datatable schemas to reduce the number of API calls it took to gather all product information
- Wrote comprehensive unit tests using Karma/Jasmine and Mocha/Chai

SKILLS

Programming Languages: JavaScript/jQuery, HTML, CSS, PHP, Typescript, Python, Java, Scala, C
Applications: Visual Studio Code, phpMyAdmin, Sourcetree, Postman
Frameworks: Backbone.js, Bootstrap, React, Material UI, Node.js, Jest, Angular4, Karma/Jasmine, Mocha/Chai
Databases: MySQL, PostgreSQL, GraphQL, MongoDB
Other Tools: Git, Bitbucket, Azure, Jira, react-i18next, Apollo, Slack
Classes:

Introduction to Computer Security	Technical Writing for Engineers
Design and Analysis of Algorithms	Discrete Structures
User-Centered Interface Design and Development	Introduction to Distributed Computing
Introduction to Database Systems	Database Modeling, Design, and Implementation

SOFTWARE PROGRAMMING PROJECTS

Evaluation of New Programming Language for Data Structures Course – For my senior project, I implemented various data structures and completed the assignments for CPE202 in order to determine the feasibility of adopting DSSL2 as the primary language for the class. I developed a list of shortcomings of the language and decided what was most important to add to the language, then spent the following months implementing File I/O.

Assisted Communication App Design – Worked in a small group to design an assisted communication app for those with nonverbal autism or other speech disabilities. We consulted parents of children with autism to determine their specific needs regarding the design and functionality, and developed a mockup of the app.

LZW Compression – Implemented the LZW compression algorithm. Parsed an input file to identify the byte-sequence and codes, used a Trie data structure as a dictionary to store those sequences, and wrote the codes to the output file as variable-length bit packets, which recycle after a specified size bit-packet length.

C Shell – Wrote a simple bash-like shell in C that supports pipelines; forks/execs to each of the existing commands.