Christy Welsh

Full Stack Engineer

I am an excellent engineer and problem solver with a background in mathematics education and technical writing. I am seeking a software engineer role and would like to work on frontend, backend, or full stack projects. Over the past year, I took the initiative to complete a full stack curriculum based in Node.JS. This opportunity added web development to my experience as a tenured teacher with a credential that includes number theory and statistics. I am a perfect fit for computer programming because I am a logical thinker, organizational guru, and self-disciplined worker, always striving for excellence and efficiency in the details.

Technical Skills:

Intermediate	*Beginner*	*Familiarity*
HTML	Python	Java
CSS	Bootstrap, Material UI, etc.	React Native
JavaScript (ES6, Async, jQuery)	Heroku	Postman
Node (React, Express, NPM)	AWS (EC2, S3, RDS)	Agile Development (Scrum)
SQL (MySQL, PostgreSQL)	Authentication (Passport, OAuth)	Data Science
MongoDB, Mongoose	Payment Processing (Stripe.JS)	NumPy, PyQT, PyCharm
Git (GitBash, GitHub)	Webpack	Babel

Projects

For each project below, I designed and built an app that integrates the layers of a full stack using Node; HTML/CSS/React Router frontend, RESTful Express backend, and either SQL or Mongo storage. I problem solved hundreds of issues that arose in each workflow stage by leveraging multiple resources, including independent debug, version testing, research, collaboration on sites such as Stack Overflow, and discussion on development forums. Final stages of each app concluded in early 2019.

Rainy Day Blog
- A fully functional 'mock' app built with Node using CRUD requests to manage personal blogs
- MySQL storage with a many-to-many database and stored procedures
- Authentication with secure & persistent login using Passport.JS and route protection
- Additional design using Bootstrap
- Deployed using AWS; EC2, S3, and RDS

Ethos
- An interactive and informational experience built with Node and MongoDB
- A click of a button retrieves and displays data from a third party API
- The server collects feedback metrics with users' 'thumbs up' or 'thumbs down' vote on each display
- Additional design with Material UI

Chirper
- Modelled after Twitter, this Node/PostgreSQL app allows users to create, read, update, and delete tweets ('chirps')
- Users can 'purchase followers' using the Stripe API via an embedded form
- Deployed using Heroku

Experience

Tenured Mathematics Teacher, Castro Valley High School   2015-2017
- Led students to math standards mastery in new curriculum and evolving state mandates by evaluating individual learning needs, collaborating with parents and support staff, and delivering lessons one-to-one, in small groups, and in whole class instruction
- Managed over 100 students per year and maintained a positive, encouraging, and safe classroom environment of diverse youth; from at-risk to high achieving, from a wide range of socio-economic backgrounds
- Improved student engagement by integrating educational technology tools such as apps on iPads, ebooks, graphing calculators, Desmos, etc.

Mathematics Teacher, Clayton Valley Charter High School   Spring Semester, 2015
- Quickly established positive relationships, stepping in to lead classes that had experienced an inconsistent fall semester
- Remediated students' deficient math skills by designing and delivering interactive lessons and by collaborating with parents, administrators, fellow teachers, and subject teams, resulting in nearly 90% of student advancement

Special Education Instructional Aide, Foothill High School   2011-2014
- Supported subject course and grade level advancement by instructing students with learning disabilities in mainstream high school curriculum
- Led students to meet short and long term goals by communicating with others on their team (parents, teachers, administrators) and by organizing academic materials for dozens of students each year
- Led individual students to solve problems related to academic, social, and behavioral challenges

Technical Writer   2007-2013
- Assisted in publication of "Get Fit Stay Well," (a college health science textbook by Janet Hopson, Pearson Publishing Ltd) by analyzing and organizing journal articles from database searches; 2011-2013
- Published news stories on deadline for Stanford News Service in science, technology, psychology and business in collaboration with Stanford researchers and the News Service's editor and photographers; 2009-2010
- Assisted in production of business proposals, legal reports, and essays as a line editor, proofreader, and copy editor for various freelance projects; 2007-2011

Education

CSU Hayward, **Bachelor of Arts Degree**, 2005, Summa Cum Laude

San Francisco State University, **Certificate in Technical and Professional Writing**, 2009

Patten University, **Mathematics Teaching Credential**, 2014

Covalence, **Full Stack Web Development**, 2018

Covalence Courses: How the Web Works, GitHub, HTML, CSS, Bootstrap, JavaScript (Modern, Intermediate, Object Oriented), the DOM, jQuery, React.JS, APIs, React Router, Node.JS, Express.JS, Databases, SQL, Authentication, Password Security, Hashing & Salting; May-Nov 2018

Other Web Development courses:

Udacity, Introduction to Python, Programming Foundations with Python, Git & GitHub, Intermediate Java, Intro to JavaScript, Intermediate JavaScript, Asynchronous JavaScript Requests, ES6 JavaScript, April to July 2018
Udemy, AWS Concepts, MongoDB with Node & Express, MongoDB Essentials, Hands on Python, April 2018 to Feb 2019
CodeCademy, Python, Java, React.JS, Express.JS, April 2018 to March 2019
MongoDB University, MongoDB Basics, MongoDB for JavaScript Developers, Feb-March 2019
EdX/DataCamp/Microsoft Virtual Academy, Python for Data Science (April 2018), Algorithms & Data Structures (Oct 2018)