VINCENT SHUALI

Full-stack software engineer and former physics professor passionate about edtech

San Francisco, CA 434-466-2075 vincent.shuali@gmail.com Portfolio LinkedIn Github

SKILLS

- Languages: Ruby, JavaScript / ES6+, TypeScript, Python, HTML 5, CSS 3, SQL, NoSQL
- Technologies: Rails, React.js, PostgreSQL, Tailwind, MongoDB, RESTful APIs, Node.js, Linux / UNIX CLI, Git, AWS

PROFESSIONAL EXPERIENCE

CommonLit | **Junior Software Engineer** June 2023 – September 2024

Technical Skills - Ruby on Rails, React, TypeScript, TailwindCSS, AWS CloudFormation, Postgres, API integrations

- Top performing among 10 non-senior engineers in past 6 months measured by pull requests approved / deployed
- Built backend routing and controllers with Ruby on Rails for featuring library text collections, used by over 6 million users, tested with RSpec / Capybara for 100% system, API, and unit test coverage, delivered ahead of schedule
- Constructed and/or upgraded over 50 TypeScript StencilJS web components and React components using TailwindCSS and prototyped with Storybook, applying TDD with Vitest / Jest and Playwright
- Led adoption and overhaul of software documentation for the engineering and product team
- Led cross-team (product / engineering / design) drive to standardize pre-release QA procedures and test accounts

Red Jester | **Software Engineer** January 2023 – May 2023

Technical Skills - Python, CI/CD, AWS Lambda, Gatsby, GraphQL, TDD, JavaScript

- Spearheaded Google Calendar API integration to automate customer-requested appointments from Shef.com API
- Built e-commerce website using Gatsby, React, and GraphQL, hosted on AWS (Cloudfront, Lambda, SNS, S3)
- Wrote unit tests in Python using unittest and pytest according to TDD principles, which covered both mock boto3 calls and REST API responses, ensuring 100% test coverage on the AWS Lambda backend
- Designed and implemented CI/CD pipeline with Concourse, automating both AWS Lambda backend and Gatsby frontend deployment

Diablo Valley College | **Physics Professor** January 2020 – June 2022

- Designed and wrote clear, engaging, interactive student experiences in Desmos and Geogebra for math and physics with applications to computer science and electronics, resulting in high praise from students and faculty
- Instructed three courses (120% course load) in one semester, requiring attention to deadlines, management of multiple tasks, and detail orientation, and relieving the department of two faculty leaves of absence.

PROJECTS

Get Together: A Meetup.com clone (on Heroku) | Ruby on Rails, SQL, AWS, React / Redux, Postgres **live** | **github**

- Authored custom React form elements to replace array of checkboxes, allowing easy styling and behavior for creating and editing Get-Together groups
- Simplified logic for backend controller database queries by introducing "find" methods as class methods on model definitions corresponding to SQL join tables

Heard App (deployed on Heroku) | React / Redux, Express.JS, MongoDB, NodeJS, (MERN) stack **live** | **github**

- Created algorithm to anonymize user IDs in conversation threads by mapping them to JavaScript key-value pairs, allowing distinguishing between interlocutors without revealing identity
- Designed method for user-created temporary "confessions" to persist in database after viewing, using a flag on its backend MongoDB model, allowing such "confessions" to persist for moderator review

Limits and Continuity Explorer | JavaScript / ES6, HTML, CSS, Chart.js **live** | **github**

- Expanded limited library of graphs to an unlimited one by generating piecewise continuous mathematical functions with randomized locations and types of discontinuity, greatly reducing repetitiveness
- Provided a uniform, accessible model to access and display information from each clickable point on the graph, by implementing each segment of function as linked list node

EDUCATION

University of Virginia - *Masters of Science - Physics* University of Toronto - *Bachelor of Science - Mathematics and Physics*