Profile:

I am a Software Engineer with skills in React, Python, Java and MySQL. I have coded React front ends interfacing with Spotify APIs and developed Spring Boot based Java service layers linking MySQL databases to UIs. I enjoy solving algorithmic coding problems and use IntelliJ, unit testing and dependency management tools throughout my work to help achieve clean, well-structured projects. I have a mathematical and engineering background and enjoy applying technology to real world problems.

Please see some of my work at https://jjiveson.github.io/PortfolioWebsite/.

Technical Skills:

- Java: Java 11 to Java 15, Spring Boot, Junit5.
- UI: React, JavaScript, HTML, CSS
- Datastore: MySQL, PostgreSQL, Redis, SQL
- Other: Python, Junit5, Gradle, IntelliJ, VS Code

Experience:

Housing rental system (Jun 2021 - Sep 2021):

I was required to build an internal system using Spring Boot, React and MySQL that could manage rental properties, match customers' requirements through search and record key rental information. The system has the following core functionality:

- Property management (creation, search, update attributes)
- People management (search criteria, search history, viewing history)
- Tenancy management (storing key information, e.g.: start/stop/type)

I used Spring Boot, React (JavaScript), Java15, persisting to MySQL. I designed, developed, and deployed the system.

UI CPD using Codecademy (Jan 2021 – May 2021):

My previous experience had been server-side focused, solving algorithm coding challenges and data parsing, and I wanted to learn about UX technologies. I covered React, HTML5, CSS, JavaScript and completed many practical problems and projects achieving several Codecademy certificates. Please see my resulting UI portfolio and GitHub code: https://jjiveson.github.io/PortfolioWebsite/.

Master's dissertation and viva (Sep 2020 - Dec 2020):

Applying mathematical models and technology at scale to help solve real world problems has always been a passion of mine. To this end, my dissertation combined FAO's (United Nation's Food and Agriculture Organisation) mathematical models for food security vs biofuel production with my data that I sourced, transformed and cleaned to ensure compatibility across models. I used Python to manage and convert the large amounts of JSON data into bespoke formats required for FAO's models. I was pleased to be recognised in the top 5% of dissertations at Twente University.

Market Data Intern, Ted Data Solutions (Jan 2020 – Mar 2020):

During my master's, I had a remote intern development opportunity which concerned sourcing, cleaning, and formatting data from the IT UK job market. I used Python to collate and transform the JSON data into a standard CSV format for upload and analysis of trends using Excel.

Algorithmic Coding Challenges (Jan 2017 – Dec 2019):

Please see my GitHub page for my completed coding challenges using both Python and Java. I enjoy searching for and contemplating the most efficient (both CPU and memory) approaches to solving problems.

Education

MSc Energy and Environmental Management, University of Twente, Netherlands (Sep 2019 – Dec 2020):

Thesis Title: Assessing the biomass potential for supplying an increased blending mandate in Argentina with a focus on food security. [Grade - 85% - Distinction]

BEng (Hons) Chemical Engineering, Swansea University (Sep 2014 – Aug 2018):

I developed understanding of broad engineering concepts, including thermodynamics and fluid mechanics, chemical processes, including process modelling and reactor design, and collection and analysis of data relating to process equipment in lab work. My final year group project (which I ended up leading as I cared about it the most), related to the design of a polycarbonate process plant. Working in a team of five, the study consisted of chemical process selection, energy and mass balance calculations, reactor selection and design, economic appraisal and costing, process safety and environmental assessment. [2:2]

A Levels, Sackville Sixth Form, East Grinstead (Sep 2012 – Aug 2014):

Spanish (A), Mathematics (B), Chemistry (C), Further Mathematics (D), AS Physics (C).

GCSEs, Sackville School, East Grinstead (Sep 2010 – Aug 2012):

3 grade A*, 6 grade A (including Maths and English), 2 grade B.

Other work experience:

Barista, Malabar Coffee House, Sevenoaks (Oct 2018 – May 2019):

Responsibilities included opening and closing the shops, stock management, operating and cashing up the till and doing the daily banking.

Summer Placement, Integrated Water Services, Walsall (Jul 2017 - Aug 2018):

Summer placement at IWS, a subsidiary of South Staffs Water PLC.

Kitchen Staff, The Ounce and Ivy, Wetherspoon, East Grinstead (Jun 2016 – Sep 2016):

Responsibilities included opening the kitchen and running the breakfast and lunch service, quality control and ensuring cleanliness and health and safety standards were upheld.

Bar Staff, The Flying Horse, Wetherspoon, Gatwick (Jul 2015 – Sep 2015):

Responsibilities included operating the till and dealing with customer satisfaction.

Interests and Hobbies: Scuba diving, Radio/Music, Art. **Languages:** English with conversational Spanish, and Catalan.

References: Available on request.