DUDLEY SPENCE

FULLSTACK ENGINEER

RIGHT TO WORK IN FRANCE - CARTE DE SÉJOUR: VIE PRIVÉE ET FAMILIALE

PROFILE

Problem-solving enthusiast and driven Software Engineer with a proven track record of developing and implementing innovative software solutions. Experienced in full-stack development and thriving in agile environments, I deliver projects that enhance user experiences and address complex challenges.

Career Objective: Currently holding a carte de séjour vie privée et familiale, allowing full work rights in France, I am seeking a software engineering position within a dynamic team in Paris or remote. Eager to contribute my technical expertise and innovative approaches to drive impactful projects and collaborate with forward-thinking professionals.

EDUCATION

Northcoders Software Engineering Course (Full-time 3-months) | Graduated Sept 2024

- Excelled in full-stack development, building interactive web applications using React, JavaScript, CSS frameworks, and Node.js, while implementing best practices like component design, state management, and RESTful APIs for efficient and scalable solutions
- Demonstrated proficiency in Git version control, Test-Driven Development with Jest, and Agile methodologies to continuously improve code quality and teamwork

Master Of Science in Computer Science | University of Liverpool | Graduated Sept 2021

- Achieved **Distinction** (80%) ~ 4.0 GPA
- Relevant coursework: Solving the N-puzzle using a Deep Q-Network
- Modules: Programming Fundamentals, Database and Information Systems, Machine Learning and Bioinspired Optimisation, Computational Intelligence, Web Programming, Ontologies and Semantic Web, Technologies for e-Commerce

Bachelor Of Science in Chemistry with Medicinal Chemistry | University of Newcastle | Graduated Sept 2019

Achieved Upper Second-Class Honours (2:1)

SOFTWARE PROJECTS

Peace Of Mind (Oct 2024) – Fullstack Developer

Tech Stack: React, Redux, JavaScript, Axios, TailwindCSS, Node.js, Express.js, MongoDB

Live: https://peaceofmind-fe-production.up.railway.app | Frontend Repo: GitHub | Backend Repo: GitHub

- Implemented React Redux for efficient state management, removing prop drilling and improving application performance.
- Ensured scalability and flexibility of data storage for users, care plans, and task logs through use of MongoDB.
- **Designed responsive and accessible UI components** with TailwindCSS, enhancing the user experience across all device types.
- Architected a complex login system using Firebase Auth, allowing users to log in as either carers or guardians with distinct account permissions and access views.

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TravelSync (Aug 2024) – Fullstack Developer

Tech Stack: React, JavaScript, Axios, Firebase, Python, FastAPI, MySQL, SQLAlchemy

Live: https://travelsync-fe-extended-production.up.railway.app | Frontend Repo: GitHub | Backend Repo: GitHub

- Led a team of 4 developers to complete a collaborative project using Agile methodologies and Git for version control
- Learned FastAPI within 2 weeks and developed a comprehensive backend API utilising SQLAlchemy for Object-Relational Mapping (ORM), Pydantic for data validation and integrating MySQL for efficient data storage and retrieval in Python
- Spearheaded the creative design process, ensuring adherence to colour-contrast accessibility standards for an inclusive user experience
- Integrated and optimised Google Places API usage to securely fetch and transmit location data between the database and frontend, while minimizing costs and improving application performance

TrailTalk (July 2024) - Fullstack Developer

Tech Stack: React, JavaScript, HTML/CSS, Axios, Node.js, Express.js, PostgreSQL

Live: https://trailtalk-production.up.railway.app | Frontend Repo: GitHub | Backend Repo: GitHub

- **Developed a dynamic and responsive user interface** in React with adaptability across various devices, enhancing user experiences through optimistic rendering and dynamic routing for improved site navigation
- Slashed development time for similar project features by 50% through modular, reusable component design leading to enhanced application maintainability and scalability
- Engineered a robust and maintainable backend API using a Model-View-Controller structure, enhancing code readability and separation of concerns
- Achieved 97%+ test coverage using Jest, guaranteeing robust code quality and error prevention, while ensuring 100% of commits passed automated tests with Husky pre-commit hooks

SKILLS

- Programming Languages: JavaScript, Python, SQL
- Front End: React, React-Router, HTML, CSS, Axios, TailwindCSS
- Back End: Node.js, Express.js, FastAPI, API
 Development
- **Technical Skills:** Object-Oriented Programming, Web design, Web applications, Functional Programming, Test-Driven Development, Machine Learning, Scalability, Code Quality, Version Control
- Databases: MySQL, PostgreSQL, SQLAlchemy, MongoDB
- **Tools:** Github, Jest (Testing), Firebase, npm, Tensorflow, Numpy, Vite
- **Transferable Skills:** Verbal Communication, Teamwork, Leadership, Agile methodologies, Organisational, Attention to Detail, Problem Solving Skills, Project Management, Ambition, Active Listener, Creativity
- Spoken Language: English (Native)

WORK EXPERIENCE

After completing my degree, I travelled and worked temporary jobs to fund the journey. These experiences broadened my perspective, improved my adaptability, and reinforced my desire to pursue a career in software engineering.

Asahi Beverage Company | Aug 2023 – May 2024 | Perth | Logistics Operations

• Identified a critical defect in 50% of Pepsi stock set for dispatch, averting a potential financial loss, earning recognition as National Quality Champion for the month

HMRC (via Brook Street Agency) | Oct 2021 – Mar 2022 | Remote | Tax Administration

• Efficiently digitised large volumes of paper tax returns, demonstrating speed and accuracy in handling structured data entry, a skill that translates to managing data in modern systems

ILTSC | June 2019 – Sept 2020 | Ilkley | Duty Manager

• **Maintained high customer satisfaction** by resolving conflicts and managing team responsibilities, demonstrating a problem-solving mindset that I continue to apply in my work today