

# DUDLEY SPENCE

## FULLSTACK DEVELOPER

56 Boulevard Voltaire, Paris | 07 45 39 75 27 | [dudley@dudleyspence.com](mailto:dudley@dudleyspence.com) | [linkedin.com/in/dudleyspence](https://linkedin.com/in/dudleyspence) | [github.com/dudleyspence](https://github.com/dudleyspence) | [www.dudleyspence.com](https://www.dudleyspence.com) | Full work rights in France

A problem-solving, results-driven software engineer with proven success developing innovative full-stack solutions and enhancing user experiences in agile environments. Seeking a role in Paris or remote to apply technical expertise, collaborate with a forward-thinking team, and drive impactful projects.

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## EDUCATION

**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

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

- Achieved Upper Second-Class Honours (2:1)
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## PROFESSIONAL DEVELOPMENT

**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
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## SOFTWARE PROJECTS

**TrailTalk (Dec 2024) – Fullstack Developer**

**Tech Stack:** React, TailwindCSS, FirebaseAuth, Axios, Node.js, Express.js, PostgreSQL

**Live:** <https://trailtalk-production.up.railway.app> | **Frontend Repo:** [GitHub](#) | **Backend Repo:** [GitHub](#)

- **Architected modular React components and leveraged custom hooks** (e.g., useArticles) to centralise API logic, ensuring scalable code that follows DRY principles
- **Implemented dynamic routing and optimistic rendering** for smooth navigation and a responsive user experience with faster perceived interactions
- **Engineered a robust and maintainable backend API** using a Model-View-Controller architecture
- **Achieved 97%+ test coverage using Jest**, ensuring high code quality and minimising errors, while enforcing 100% commit compliance using Husky pre-commit hooks for automated testing.

**Personal Portfolio (Dec 2024) – Frontend Developer**

**Tech Stack:** Next.js, TailwindCSS, next-intl, Canva

**Live:** [www.dudleyspence.com](https://www.dudleyspence.com) | **Frontend Repo:** [GitHub](#)

- **Leveraged Server-Side Rendering (SSR) and static rendering** significantly enhancing performance
- **Internationalised all site content** using next-intl to support French and English
- **Scored greater than 94+ lighthouse score for Performance, Accessibility, Best Practices and SEO on all pages of the site**

**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](#)

- **Architected a complex auth context with 2 different account types** using Firebase Auth and React Context API

- **Refactored to use React Redux** for global state management, removing prop drilling and improving scalability
- **Managed complex data manipulation** involving date and time for dynamic routing, storage of historical tasks and leveraging Agenda.js to schedule and track tasks efficiently

## 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 four developers** using Agile methodologies and Git for effective collaboration and version control
- **Completed development of an MVP in two weeks** while achieving competency in newly learned technologies such as FastAPI and SQLAlchemy
- **Spearheaded inclusive design efforts**, ensuring adherence to WCAG color-contrast accessibility standards
- **Slashed API usage costs** by implementing on-demand data fetching from the Google Places API, reducing unnecessary calls and boosting overall app performance

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## SKILLS

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

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## 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

- **Achieved National Quality Champion for the month** by identifying a critical defect in 50% of Pepsi stock, preventing financial loss and demonstrating attention to detail and problem-solving skills

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

- Digitised large volumes of paper tax returns with speed and accuracy, demonstrating data management skills transferable to database handling and backend development.

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

- **Resolved conflicts and managed team operations**, reflecting strong problem-solving and leadership skills applicable to agile development environments.