# DUDLEY SPENCE

## FULLSTACK DEVELOPER

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github.com/dudleyspence | www.dudleyspence.com | Full work rights in France

**Full-Stack Developer** with a strong foundation in building scalable, high-performance web applications using modern frameworks like React, Node.js, and Next.js. Skilled in both front-end and back-end development, including integrating APIs and delivering intuitive user experiences. Currently seeking my **first career role** in **Paris** to contribute to impactful projects and collaborate with a forward-thinking team.

**Core Skills:** JavaScript, React, TypeScript, Next.js, Node.js, PostgreSQL, TailwindCSS

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## WORK EXPERIENCE

**Tech Returners (Jan 2025 - Current)** – Freelance Fullstack Developer (Contract) | Remote

Tech Stack: Next.js, TypeScript, Next-Auth, Vitest, Prisma, HeroUI

- Developing a scalable, full-stack **events platform** as per the client-provided MVP specification, integrating role-based access control (RBAC) for **Admins** and **Customers** to ensure secure, tailored functionality
- Implementing robust **server actions** using **React 19** and thoroughly testing them with **Vitest**, ensuring reliable performance and maintainability
- Expected completion within 4 weeks, with major progress on authentication, event scheduling, and secure data access

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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

**TravelSync (Jan 2025)** – Fullstack Developer

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

Live: https://travelsync.up.railway.app/ | Frontend Repo: GitHub | Backend Repo: GitHub

- **Led a team of four developers to successfully deliver an MVP ahead of schedule** within the two-week project timeline
- Extended the project independently, using careful state management and **Context API** to consolidate features into fewer pages, creating a more intuitive user experience
- **Utilised React-Query** for efficient data fetching and caching, enhancing reliability and responsiveness
- **Built a FastAPI backend** with a MySQL database, leveraging **SQLAlchemy object relational mapping** and **Pydantic schemas** for structured data modelling and validation

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

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

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

- **Architected modular React components and developed 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 | 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, Jest**

**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

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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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# SKILLS

- **Programming Languages:** JavaScript, TypeScript, 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)