




# Pieter O'Hearn

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## Profile

Senior Full-Stack Engineer specialising in identity and digital services platforms. Experienced in designing and scaling cross-platform solutions across Java/Spring, Node.js, and React Native ecosystems. Proven record of leading digital transformation initiatives in both public and private sectors, combining deep technical expertise with user-centric design. Passionate about observability, security-by-design, and clean architecture to deliver reliable, privacy-preserving digital products.

## Core Skills

### LANGUAGES & FRAMEWORKS

Java (*Spring Boot*), Kotlin, Node.js, TypeScript, React.js, React Native, Angular, Python

### ARCHITECTURE & INFRASTRUCTURE

Microservices, Docker, CI/CD (*GitLab, Azure DevOps*), Observability (*OpenTelemetry, New Relic, Splunk, Sentry*)

### IDENTITY & SECURITY

Verifiable Credentials, OAuth2, OpenID Connect, EUDI Wallets, Privacy-by-Design

### DATABASES

PostgreSQL, MongoDB, Redis, DynamoDB

### PRACTICES

TDD, Clean Architecture, Agile / Scrum

## Experience

### DATAKEEPER | SENIOR FULL-STACK ENGINEER



Amsterdam, Netherlands | September 2024 - Present

Datakeeper is a digital identity wallet platform that enables users to securely store and share verifiable credentials with trusted parties.

- Architecting and developing the EUDI-compliant digital identity wallet SDK, enabling third-party integrations with secure identity features across mobile and web.
- Implemented end-to-end observability using OpenTelemetry across Spring Boot and Node.js backends, integrating distributed tracing, metrics, and logs.
- Designed and spearheaded architecture for an improved scraping service that securely retrieves source data for verifiable credentials, balancing data privacy and security while ensuring adaptability to changing external websites.
- Collaborated with cross-functional teams to define secure, scalable backend architectures in both Spring (Java) and Node.js, aligning technical decisions with product and regulatory requirements.
- Drove initiatives to improve developer experience and maintainability through clean architecture, modular design and automated testing frameworks.

**SERVICE NSW – MOBILE APP TEAM | SENIOR FULL-STACK ENGINEER**

Sydney, Australia | December 2023 – September 2024



Service NSW operates one of Australia's largest public digital platforms, enabling over eight million citizens to securely access a centralised digital platform that connects citizens to personalised government services, including the Digital Driver Licence and digital notifications.

- Specialised in React Native mobile development across Android and iOS, maintaining and improving an app serving five million active users.
- Developed a cross-team component library, ensuring accessibility (WCAG 2.2 AA) and design consistency across all product teams, in close collaboration with UX and design.
- Implemented new citizen-facing features, such as a secure digital notification inbox and native transaction experiences, improving engagement and reducing friction.
- Designed and built a scalable Grants Service, integrating backend APIs and mobile UI to help citizens apply for and track grants during crisis periods, increasing accessibility and reliability under high load.
- Partnered with designers, policy specialists, and engineers in a fast-moving, product-driven environment focused on impact, not process.

**SERVICE NSW – DIGITAL NOTIFICATIONS PLATFORM | FULL-STACK ENGINEER**

March 2022 – December 2023

Worked on the notifications platform that enabled multiple agencies to securely communicate with millions of citizens through a unified messaging system.

- Re-architected a legacy monolith into microservices, introducing asynchronous queues and auto-scaling to ensure high availability during surges in message volume.
- Applied observability and performance monitoring tools, allowing the team to cut production incidents and improving API latency by 40-60%.
- Led a proof-of-concept database redesign, producing detailed ERDs and validating schema improvements through rigorous testing.
- Adopted the Backend-for-Frontend (BFF) pattern to deliver dynamically populated, data-driven frontend views that optimised the citizen experience.

**SERVICE NSW – DIGITAL NOTIFICATIONS PLATFORM | JUNIOR FULL-STACK ENGINEER**

June 2021 – March 2022

- Developed and rigorously tested backend APIs for a high-traffic notifications platform, facilitating communication between state agencies and over 8 million NSW citizens.
- Supported the design and deployment of frontend pages, focusing on improving user experience and accessibility.

## Education

### **BACHELOR OF ENGINEERING HONOURS (SOFTWARE)**

*The University of Sydney, 2022*



- Gained comprehensive knowledge in software engineering principles, including software development lifecycle, systems engineering, and project management, equipping me with the skills to lead and manage complex software projects.
- Specialised in advanced topics such as algorithms, data structures, and software design patterns, enhancing my ability to develop efficient, maintainable, and scalable software solutions.

### **BACHELOR OF SCIENCE (COMPUTER SCIENCE)**

*The University of Sydney, 2022*

- Acquired a solid foundation in computer science theory, including computational complexity, operating systems, and computer architecture, providing a deep understanding of how software interacts with hardware.
- Developed practical skills in programming languages (e.g., Java, Python, C), databases, and web technologies, enabling me to build robust and versatile applications across various platforms.