

## Technical Skills

### Back-End Development

C++, Python, Node.js  
SQL (PostgreSQL, MariaDB)  
gRPC APIs, REST APIs

### Front-End Development

TypeScript, Angular, React, SolidJS

### ML Ops / Cloud Computing

TensorFlow and JAX Serving (GPU/TPU)  
Google Cloud Platform (GCP)  
Post-training Infrastructure

## Languages

English (fluent)

Korean (mother tongue)

Japanese (bilingual)

Spanish (intermediate, B1)

German (basic, A2)

Finnish (intermediate, B1)

Rwandan (intermediate)

## Work Experience

### Google DeepMind, Senior Software Engineer

08. 2023 – Present | London, United Kingdom

Senior UX Engineer 11. 2022 – 08. 2023 | UX Engineer 01. 2021 – 11. 2022

- Led the integration of model serving into Gemini's human data collection platform, reducing failures in our team's model servers to near zero.
- Developed and maintained the full-stack platform for Gemini's human data collection using internal stacks in C++, Python, SQL and TypeScript; this platform has since evolved into the company's primary human data collection platform, supporting a large-scale data collection effort.<sup>1</sup>
- Designed, built and deployed the initial full-stack platform for Isomorphic Labs using React, Node.js, and various Google Cloud Platform services, including Bigtable, BigQuery and Cloud Functions, establishing early-stage AI-driven drug discovery research using AlphaFold.

### Fjord, Creative Technologist

07. 2017 – 12. 2020 | Berlin, Germany

- Integrated technical solutions into service design projects, developing interactive user journey maps and insights dashboards for Volkswagen's mobility research.
- Developed and deployed high-fidelity prototypes using React, Node.js, PostgreSQL, MongoDB and Heroku to enhance user experience and validate design concepts with clients.
- Led several complex data visualisation projects using Three.js to present qualitative and quantitative data, enabling clients to gain actionable insights from user research.

### Linja<sup>2</sup>, Interaction Designer & Developer

11. 2016 – 06. 2017 | Helsinki, Finland

- Engineered reusable templates for the internal dashboard platform of an aerospace and defence client, improving maintainability and reducing development time and ensured compatibility with legacy frameworks.

### Aalto University, Web Designer & Web Developer – working student

09. 2015 – 11. 2016 | Helsinki, Finland

- Designed, developed, and maintained websites for Aalto University, including 4 departmental sites for the School of Arts, Design and Architecture and online resources for the university's library; these were the department's first websites to fully support mobile browsers.

### Moto, Web Designer & Web Developer – freelance, full-time

01. 2015 – 07. 2015 | Seoul, South Korea

Junior Industrial Designer 01. 2010 – 08. 2010

- Spearheaded the development and launch of the company's first mobile-friendly website using responsive design principles and WordPress, improving the company's ability to reach and engage with customers on mobile platforms with maintainability for non-tech savvy industrial designers.

### University of Rwanda<sup>3</sup>, Lecturer

10. 2012 – 01. 2015 | Muhanga & Kigali, Rwanda

- Delivered lectures in computer science (C/C++ programming) and design (product, graphics, and motion design) to undergraduate students.
- Designed and distributed typing practice software for Rwandan students, enhancing their typing proficiency and overall computer literacy.

### About:Blank, Web Designer & Web Developer – working student

04. 2011 – 03. 2012 | Helsinki, Finland & Seoul, South Korea

- Designed and developed the company's multilingual e-commerce platform using OpenCart, including features for product catalog management, user accounts, and online ordering.
- Developed a custom payment gateway plugin for Korean transactions.

<sup>1</sup> Core contributor in Gemini publications: <https://arxiv.org/abs/2312.11805>, <https://arxiv.org/abs/2403.05530>

<sup>2</sup> Acquired by Vincit in October 2017

<sup>3</sup> Part of mandatory military service in South Korea

## **Daejeon Institute of Education Information**, Instructor – working student

01. 2008 – 12. 2008 | Daejeon, South Korea

- Taught robotics programming fundamentals to lower secondary school students using a humanoid robotics kit, covering concepts in introductory C programming and microcontroller control.

## **Education**

### **Aalto University**, MA in Collaborative and Industrial Design

08. 2010 – 07. 2016<sup>4</sup> | Helsinki, Finland

- Redesigned and implemented the school's blogging platform using WordPress multisite feature for my master's thesis<sup>5</sup> project, providing well-branded and fully responsive templates with a much more improved user experience for students and faculties.

### **KAIST**, BSc in Industrial Design

02. 2006 – 01. 2010 | Daejeon, South Korea

- Awarded full scholarship
- Student representative (2009), spearheaded planning of final year exhibition
- Final year exhibitions showcased at 100% Design Tokyo and Week & T Seoul (sponsored by SK Telecom<sup>6</sup>).

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<sup>4</sup> Leave of absence: 07. 2012 – 08. 2015

<sup>5</sup> <https://urn.fi/URN:NBN:fi:aalto-201606162374>

<sup>6</sup> The biggest mobile network provider in South Korea