SAMI PAANANEN

SOFTWARE ENGINEER

PROFILE

I specialize in Next.js, React, Python and Typescript, with a solid foundation in backend development using Node.js and Python. I am also experienced with cloud platforms such as AWS, Vercel, and Google Cloud to build scalable and high-performing applications.

Technology has always been a passion and a long-time hobby of mine, from assembling computers to creating my own games. My enthusiasm for continuous learning drives me to stay updated on the latest industry trends and emerging technologies through professional courses, industry news, and active engagement in the developer community.

I am an analytical and detail-oriented with a strong expertise for problem-solving. My self-motivation and excellent communication skills make me an effective team player, fostering seamless collaboration in diverse environments. With a strong background in mathematics, I excel in working with data-driven tasks and logical challenges.

In my spare time, I like to keep my mind and body in shape through goal-oriented exercise.

SKILLS

REACT | NEXT.JS | TYPESCRIPT
JAVASCRIPT | HTML5 | CSS3
PYTHON3 | NODE.JS | GIT
MONGODB | SCRUM | SQL

CERTIFICATES

- Machine Learning Specialization, Stanford University, 01/2025
- Web Dev Simplified, React Beginner 02/2024
- Web Dev Simplified, React Advanced 04/2024
- Web Dev Simplified, Next.js 06/2024
- Data analysis with Python 06/2024
- Data Visualization 07/2024

COURSES

- Amazon Cloud Foundation, Metropolia UAS, 2023
- Artificial Intelligence with Python, Metropolia UAS, 2024
- Advanced Django, Codio, 2024
- Data Analysis with Python, FreeCodeCamp, 2024
- Data Structures and Algorithms, Metropolia UAS, 2024
- Data Visualization, FreeCodeCamp, 2024
- Ethical Hacking, Cisco, 2024
- Google Cloud Computing Fundamentals, Google, 2024
- Power Platform Fundamentals, Microsoft, 2024
- Responsive Web Design, FreeCodeCamp, 2024
- User-centered Design, Metropolia UAS, 2023

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EDUCATION BACKGROUND

Bachelor of Engineering (2022-2024)
Metropolia University of Applied Sciences

WORK EXPERIENCE

Software Developer

Metropolia UAS 2024 | 10 weeks

- Designed and developed a comprehensive Helmet.js course to teach secure web development practices.
- Focused on enhancing students' understanding of implementing security headers in Node.js applications.
- Contributed to the university's curriculum by creating practical and relevant learning materials tailored to modern web development security.

Software Developer

Metropolia UAS 2024 | 10 weeks

- Collaborated on the creation of an Oracle SQL course with a focus on PL/SQL programming.
- Developed course content to teach advanced database management and procedural programming techniques.
- Enhanced students' understanding of database design, query optimization, and PL/SQL scripting for real-world applications.

Grader operator

YIT / Asfalttikallio | 2019 - 2022

- This was my last position where I realized I needed new challenges, which my current work didn’t provide. So, I embarked on an academic journey to become a proficient full-stack software engineer.

Grader operator

Katu-Karhu Oy | 2009 - 2019

- Working as a grader operator taught me everything about precision, hard work, long hours, and working under pressure.

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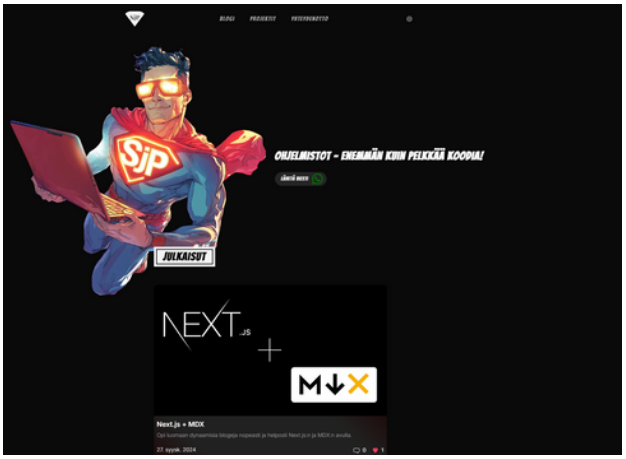
PROJECTS



sjpdev.io

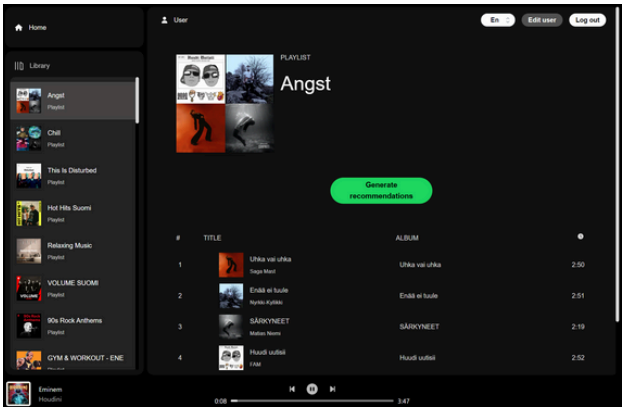
My personal project involves developing a portfolio application utilizing Next.js, Shadcn UI, Rich text editor - Notion, Tailwind, Resend, and Neon postgreSQL.

The application includes blog and project sections using MDX for content management.

Users are authenticated using NextAuth with Google OAuth and authorized to add comments and likes on blog posts and project studies.

The contact page functionality is implemented with Resend, the email templates are designed with React Email, and Google Recaptcha v3 is used for form security.

As a final touch, I trained a custom OpenAI model using RAG to function as a helpful chatbot/AI agent.

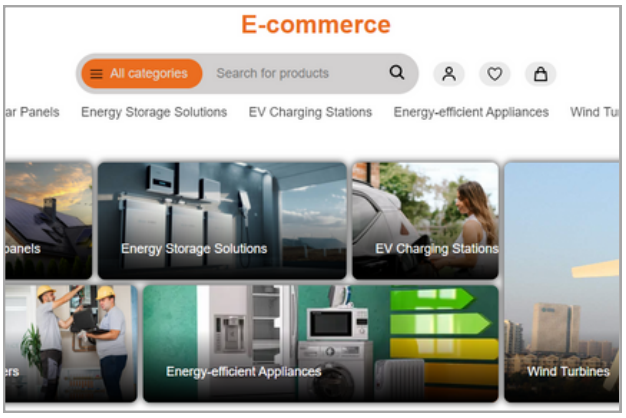


Music recommendation app

This school project involved developing a song recommendation system using machine learning. My primary responsibility was backend development, though I also implemented the UI's music player.

I designed the API in Python, leveraging Django as the framework. By integrating the Spotify API, I retrieved real user playlists to generate song recommendations. These recommendations were computed using cosine similarity between the user's playlist and a large dataset, utilizing scikit-learn and pandas for data processing.

Additionally, I was responsible for setting up the CI/CD pipeline and the deployment to AWS.



E-commerce app

In this school project, we developed a fully functional e-commerce application for selling energy-efficient appliances using the MERN stack. I contributed to both the frontend and backend development.

On the backend, I implemented the API using Node.js and authenticated users with JSON Web Tokens to maintain session persistence across browser reloads.

I also enabled password reset functionality by generating dynamic, expiring routes upon user request, which were sent via email using NodeMailer.

For the frontend, I primarily focused on designing the header, incorporating features such as a shopping cart, likes, and user settings.

For more projects, please visit my portfolio website

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