



Simon dos Reis Spedsbjerg

"An engineer allows us to do more with less"

Summary

Software engineer with strong expertise in REST API development and system architecture. Experience with automated testing, deployment pipelines, and security measures in containerized and cloud environments. Passionate about turning complex code into stable, scalable, and secure production-ready solutions.

Education

- 2023–2025 **Master's in Software Engineering**, *University of Southern Denmark*, Odense
Focus on scientific and unconventional, yet practical, methods in software development
- 2020–2023 **Bachelor's Degree**, *University of Southern Denmark*, Odense
Learning software development and engineering methodologies

Master's Thesis

- Title Root-Causing and Event Identification Through Sensor Data
- Supervisor Aslak Johansen
- Description Design and development of a new event-based software pattern using graph structures to predict upcoming or ongoing events.
- Technologies C#, MQTT, Newtonsoft, .NET Roslyn, Docker, Machine Learning

Bachelor's Thesis

- Title Development of a tool for prediction of rare diseases based on patient symptoms
- Description Development of a decision support tool for general practitioners to assess referral needs to specialists.
- Technologies C#, ASP.NET, SQL, Docker, React Native, Newtonsoft for REST implementation

Notable Personal Projects

Rare Disease Predictor	Continued development of the bachelor project with a focus on reducing technical debt. My contributions included refactoring API endpoints according to HTTP standards, migrating from SQLite to MySQL, and implementing security systems.
Box Grabbing for Robotic Arms	Development of AI to determine optimal grasping points for boxes. I developed the AI tool, its API endpoints, and the command receiver on the robot. The AI was developed in C++ due to performance constraints.

Languages

Danish	Native	
English	Fluent	
Portuguese	Advanced beginner	<i>Completed courses and practiced for over 2 years</i>

Expertise

C# .NET	Worked with a wide range of topics, from machine learning to REST API development
Docker	Used for all my development projects, including automatic rollout of new images after code passes through the pipeline
SQL	Experience with MySQL, PostgreSQL, and SQLite
CI/CD	GitHub Actions and Docker images via Docker Hub
Reliability	
C++	Used when performance optimization or specific system requirements are necessary

Interests

Literature	Reading	Music	Primarily guitar
3D Modeling			

Your future Associate Software Engineer

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