

Software Developer – backend development for workflow automation

I am applying for the Software Developer position at NovaTech because I want to build backend systems that improve workflows and handle data efficiently. Your focus on workflow automation aligns with my interest in developing software that simplifies processes and optimizes performance. I enjoy working with scalable backend solutions that process data efficiently and integrate smoothly with other systems.

The way NovaTech handles data processing and system scaling is particularly interesting to me, and I look forward to contributing with my skills in backend development, performance optimization, and data architecture.

Experienced in backend development with Java and Python

Through my MSc in Computer Science at the University of Copenhagen, I worked extensively with Java and Python in projects focused on backend development and system performance. My master's thesis involved developing a compiler for a functional programming language, where I built a lexer, parser, and semantic analyzer to improve execution speed.

This experience required working with structured, scalable code and handling intricate system logic. In addition, I have worked on data processing pipelines and developed backend components that support large-scale applications.

Strong focus on performance optimization

In my coursework on Software Performance Optimization, I worked on identifying inefficiencies, improving execution speed, and refining system architecture. During my thesis project, I analyzed and optimized code structure, memory usage, and execution efficiency, applying techniques that reduce bottlenecks and improve overall performance.

I also have experience with profiling tools and debugging strategies to pinpoint and resolve performance issues in real-time applications.

Database design and API development

I have experience working with SQL and NoSQL databases through both academic projects and coursework in Advanced Programming. I have designed data models, optimized queries, and structured API endpoints to support reliable data handling and integration between systems. I have also built RESTful APIs that connect backend services efficiently and ensure seamless communication between different system components.

I would be happy to discuss how I can contribute to NovaTech's development team. Let me know when it would suit you for a conversation.

Best regards,

Alex Ravnborg
+45 1234 5678
alexravnborg@example.com
linkedin.com/in/alravn