

Oslo 2024

## **Application for “Software Engineer” Position**

I am currently working as a Senior Software Engineer at Elhub AS - Statnett in Oslo, Norway. In this role, I work as a full-stack developer within the EDIEL system, a key platform used in the Nordic energy sector. This system facilitates the validation and exchange of messages between market participants and the Elhub system. My work involves technologies such as the .NET Framework, MVC, SQL Server, Kendo UI, NServiceBus, Ansible, TeamCity, and Octopus.

I am highly proficient in .NET Core, React, .NET Framework, C#, HTML, CSS, JavaScript and have strong SQL skills in relational databases like MSSQL Server, MySQL, and Oracle. Additionally, I have experience with cloud technologies (AWS) and NoSQL databases such as MongoDB and Redis. I am well-versed in source control and other programming languages, including Java, Python, C++ and MATLAB.

With over 15 years of experience as a software engineer, I have designed and developed RESTful APIs and applications for both web-based and desktop platforms using technologies like C#, .NET Core, React, Java, ASP.NET, and MSSQL Server, Oracle, Redis, and MongoDB. My portfolio includes projects such as a service monitoring tool, card issuing process systems, business process management (BPM) for MBBank, financial pattern recognition systems, HR management software, content management systems, payment gateways for online games, online booking systems, financial services applications, navigation and command gateway as well as application for node simulator, node command and scheduling, just to name a few.

In addition to my industry experience, I have over five years of research experience. I hold a Ph.D. in Computer Science from NTNU, Norway. During my Ph.D. program, I developed efficient algorithms and novel theoretical foundations for event detection (e.g., change, anomaly, and fraud detection from tensor data). These solutions were implemented in Java, and Python, C++, MATLAB, and have resulted in 16 peer-reviewed publications in highly ranked international journals and prestigious conferences in artificial intelligence and data science (e.g., ICDE, with a 3% acceptance rate). Throughout my Ph.D., I also gained significant expertise in machine learning, optimization, and classification techniques, and served as a teaching assistant for an NLP using Python course at NTNU.

My strong foundation in algorithms and mathematics is demonstrated by the national prize I won in Mathematics. I also have a deep understanding of security, having discovered vulnerabilities in platforms like Google, Microsoft, and GitHub. My combined experience in academia and industry, with my problem solving skills has honed my ability to adapt quickly, work independently, and collaborate effectively in team environments.

With over 20 years of experience in software engineering and a proven track record in both research and industry, I am confident in my ability to solve complex problems and contribute to the development of advanced software systems. I am excited about the opportunity to bring my expertise to your team and make a significant impact.

Thank you for considering my application. I have attached my resume and would welcome the opportunity to join your team and contribute to its success. I am eager to be part of a team that drives technological advancements and creates impactful solutions that benefit society.

Sincerely,

**Huy Quang Duong**