# THOMAS BERGHEIM

# Full-stack developer and architect

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bergheim

in thomasbergheim

Accomplished software engineer with comprehensive expertise in frontend and backend development. Experienced in scaling large systems and leading high-performing teams. Combines keen passion for development and architectural design to deliver superior solutions and drive business growth.

# **EXPERIENCE**

#### Chief Architect

Neptune Software # 2017 - Ongoing

As the lead architect for the DXP Open Edition no code/low code platform, I spurred my engineering team towards timely delivery of yearly features. My role blended anticipating future trends with matching product features to the demands of both our in-house needs and client expectations. My strategic planning helped big-ticket clients achieve their goals, such as:

- Processing hundreds of millions of transactions seamlessly in Point-of-Sale (PoS) systems
- Scaled management and distribution of hundreds of millions of COVID-19 vaccines
- Real-time coordination of fueling and pickups for a fleet of thousands of trucks

In addition to internal goals such as:

- Facilitated close collaboration with our "SAP Edition" product team to streamline the two products into a singular, more efficient solution
- Played a pivotal role in implementing a robust CI/CD pipeline that encompassed everything from unit tests to release pipelines
- Onboarding and coaching, enhancing overall team performance and productivity

#### Senior consultant & tech lead

Bouvet # 2011 - 2017

As a senior consultant and divisional tech lead, I would do presales in addition to helping big clients such as Sporveien, Hafslund, Statkraft and Mattilsynet establish tailored solutions.

# **Cloud Application Engineer**

Tilera = 2010 - 2011

Oversaw the complex process of porting HPHP (Hip-Hop from Facebook) from x86 to the TILE architecture. Successfully modified the codebase to enable efficient compilation on the new architecture and capitalized on the significantly increased number of cores, albeit of lower performance, to boost system efficiency. Conducted thorough performance analysis to identify potential penalty areas and effectively implemented corrective actions. Further improved system performance through the implementation of optimized coding practices.

### CTO & co-founder

Recoil (Catch-Gamer) = 2006 - 2011

Worked with a pioneering startup in Norway that was recognized as one of the country's largest portals, Catch-Gamer, with millions of daily page views. An innovative social news site, dedicated to e-sports, offered a webshop, user profiles, streaming, server renting over SMS, server plugins and much more.



# **SKILLS**

TypeScript JavaScript HTML CSS PWA
Lisp Python Java C
PostgreSQL sqlite  MySQL MongoDB MS SQL
Git CI/CD TDD Linux
AWS GCP Azure

# **EDUCATION**

# Master of Science NTNU ■ 2011

- Master Thesis: Parallel Algorithms for Neuronal Spike Sorting

# **PROJECTS**

### Neptune DXP Open Edition

Neptune Software 2017 - Ongoing

I closely contributed to the inception and development of DXP Open Edition, an innovative low-code/no-code platform grounded on NodeJS, encompassing an array of extensive functionalities, such as:

- App designer: A drag and drop module for quick and easy creation of webpages, PWA, and hybrid apps, with seamless API and data integration
- API Designer: Integrated a module for custom API design supporting Swagger/OpenAPI 4
- PDF Designer: Introduced a drag-and-drop template designer to develop data-driven PDFs for use such as invoices or receipts
- Server Scripts: Fortified the platform with "server scripts," allowing users to extend server-side support with Type-Script or JavaScript. This feature significantly amplifies the versatility and potential of our platform, meeting different customer needs
- Database Support: Enabled compatibility with multiple databases like Postgres and MS SQL, coupled with specific database abstractions to enhance functionality for specific databases
- Fault Tolerant Migrations: Ensured fail-safe data migrations across all supported databases
- Scale: support multiple cores, multiple servers. Many customers would run this in Docker and Kubernetes

 architecture
 team lead
 TypeScript
 SQL
 CI/CD
 Docker

# Neptune DXP Cloud

Neptune Software 📋 Sept 2021 - Ongoing

Played a crucial role in devising a Platform-as-a-Service (PaaS) solution, DXP Cloud, aimed at optimizing user experience for running DXP Open Edition through a dedicated self-serve portal.

- Led requirement elucidation and clarification, ensuring the project scope was aligned with business objectives.
- Implemented security structures, focusing on the protection of sensitive data and the prevention of potential cyber threats.
- Assessed and selected appropriate technology and cloud stacks, aligning with project goals and company's IT infrastructure.
- Performed progressive tracking of project developments, providing strategic guidance to the team to enhance workflow efficiency and project outcomes.

MS Azure MS SQL kubernetes docker

#### Undisclosed newssite

Private = 2024 - Ongoing

- Completely redesigned a popular newssite with extensive optimizations that immediately increased ad views by 30%
- Optimized third-party integrations through asynchronous operations and aggressive caching and data validation strategies.

 Nextjs
 SASS
 TailwindCSS
 Nginx
 PayloadCMS
 Sentry

#### Sporveien DRIV

**Bouvet 2**016-2017

Technical lead on an innovative project at Sporveien aimed at developing a real-time tracking system for facilitating efficient subway operations.

The system was designed a series of micro services. Many independent crawlers, apps as well as monitoring systems.

- Created and deployed a series of data crawlers that would fetch data from many datasilos that was then merged
- Deployed a series of bespoke systems to establish a cohesive infrastructure including a real-time dashboard, a proactive maintenance scheduler, and a track planning module.
- This proactive approach maximized productivity by minimizing unexpected track stoppages, optimizing service scheduling and fostering better operational efficiency.

TypeScript ELM RxJS (reactive programming) RethinkDB C#.NET