Pelle Johnsen

Contact Information:

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- **LinkedIn:** linkedin.com/in/pellej
- **Year of Birth:** 1972

Professional Summary:

Seasoned Software Developer and Architect with over 27 years of experience, specializing in systems ranging from resource-constrained embedded devices to scalable cloud-based distributed servers. Proficient in 3D Graphics with 17 years of experience, including lighting, VFX, and character rigging. Passionate about delivering efficient, reliable, and innovative technological solutions.

Core Competencies:

- **Programming Languages:** TypeScript, Rust, Python, C++, C#, Go, JavaScript, Java
- **Technologies:** AWS Services (ECS, Lambda, RDS, S3, CloudFront, SageMaker), Docker, Kubernetes, WebGL, Unreal Engine 5, Babylon.js, OpenGL ES, Qt/QML
- **AI Tools**:
  - LLM/coding: GitHub Copilot, Bolt(.new and .diy), Ollama
  - Gen AI (image, 3d): SwarmUI, ComfyUI
- **DevOps Tools:** Pulumi, GitHub Actions, CI/CD pipelines, Terraform, Jenkins, Bitbucket Pipelines
- **Frameworks and Platforms:** React, Node.js, Django, AWS Serverless Architecture
- **3D Graphics Software:** Unreal Engine, Unity, Babylon.js, Blender, Maya, Krita, Photoshop
- **Languages:** Danish (Native), English (Fluent), German (Basic), Chinese (Beginner)

Professional Experience:

CTO, Skybox.gg *January 2023 – Present*

- Migrated the main eSports analytics infrastructure to AWS with a multi-account setup and implemented DevOps practices using Pulumi.
- Developed a CS:GO 3D replay tool for broadcasting using Unreal Engine 5 with Lumen and real-time ray tracing.
- Built a fan engagement multiplayer casual game prototype using Babylon.js and PWA for mobile.
- Enhanced recruitment, employee evaluation, and career development processes.
- Managed development team leads and individual developers.

Senior Solution Architect, Amazon Web Services *March 2021 – December 2022*

- Advised startup clients on cloud architecture, focusing on security, reliability, cost optimization, and performance.

- Demonstrated solutions to address customer challenges using AWS services like CDK (IaC), ECS, EKS, CloudFront, API Gateway, RDS, Aurora, and SageMaker.
- Specialized in serverless technologies, containerization, databases, analytics, and AI/ML.

Chief Software Architect, TIMEmSYSTEM *February 2020 – March 2021*

- Improved product quality and development efficiency by introducing GitHub-based workflows and code reviews.
- Implemented CI/CD pipelines using GitHub Actions and automated deployment processes.
- Designed new architecture leveraging Kubernetes on Azure with infrastructure as code via Pulumi.
- Mentored the team in new technologies and streamlined release planning.
- Led development and operations teams.

CTO, BRAND3D *January 2018 – January 2020*

- Led technical development for real-time 3D browser experiences.
- Oversaw front-end and back-end development, cloud server infrastructure, and CI/CD processes.
- Architected new applications and managed DevOps engineering.
- Acted as the technical liaison for customer relations.

VP of 3D Technology, GlobalScanning *July 2016 – January 2018*

- Advanced 3D scanning technologies and cloud services.
- Continued development of p3d.in, enhancing core components and server infrastructure.
- Established server tooling, workflows, and CI/CD pipelines.
- Initiated a new 2D imaging cloud project using Kubernetes, Django, and Ember.js.
- Recruited developers and DevOps engineers.

Software Lead, BLUETOWN *July 2015 – July 2016*

- Developed scalable backend and frontend solutions for millions of end-users.
- Designed customer signup and billing systems for WiFi and VoIP services.
- Configured networking setups including routers, captive portals, RADIUS, and VLANs.
- Explored backbone connectivity over VSAT technology.

Core Developer and Architect, p3d.in *September 2011 – January 2020*

- Developed both frontend and backend for p3d.in, enhancing the online 3D model sharing platform.
- Transitioned backend infrastructure to Docker and Kubernetes.
- Migrated frontend technologies from jQuery to Ember.js.

Previous Roles:

- **Consultant, Laerdal Medical** (2011 – 2015): Developed software for embedded Linux platforms using Qt/QML, optimized UI performance, and implemented automated testing.
- **Co Founder & CTO, SoftMobile** (2008 – 2011): Developed vertical applications with mobile clients for location-based services using J2ME, Python, and Django.
- **Software Developer, Mozilla Corporation** (March 2008 – September 2008): Developed new C++ APIs for embedding Firefox in other applications, with support for Qt on Windows, Linux, and Maemo.
- **Various Technical and Leadership Roles** at companies like Core Mobility, ZeitGuyz, Krogh Mortensen Animation, The National Film School of Denmark, MagicStudios, Nokia Mobile Phones, and more, dating back to 1995.

Education:

- **B.Sc.E.E in Electronics/Computer Science** Engineering Academy of Denmark (1992 – 1995) Thesis: Object-Oriented Programming using C for Mobile Phones
- **Digital Artist Program** Truemax Academy (2005 – 2006) Focus on 3D Graphics using 3D Studio Max, Maya, ZBrush, and Photoshop; skills in modeling, texturing, rigging, animation, lighting, and rendering.

Additional Training:

- Object-Oriented Analysis and Design for Embedded Systems
- Project Planning and Management
- NVIDIA Fundamentals of Deep Learning

Memberships & Contributions:

- **W3C WebGPU Community Working Group** (2020 – 2021): Contributed to the development of WebGPU, a cross-platform standard for GPU power in browsers and native apps.
- **Open Source Projects:**
  - **Loadem (Author):** A command-line tool for load testing web applications written in Rust (GitHub Link).
  - **Naga (Contributor):** Universal shader translator in Rust (GitHub Link).

Additional Skills:

- **DevOps & Infrastructure:** Expertise in setting up multi-account AWS environments using Control Tower, infrastructure as code with Pulumi and Terraform, CI/CD pipelines, and container orchestration with Kubernetes.
- **3D Graphics & Animation:** Proficient in character rigging, lighting, VFX, and rendering with Unreal Engine, Maya, and other industry-standard tools.
- **Cloud Computing:** Extensive experience with AWS services, serverless architectures, and scalable distributed systems.
- **Language & Communication:** Strong communicator with experience in leading teams, mentoring, and acting as a technical liaison for customers.

Personal Interests:

- Passionate about continuous learning in technology, 3D graphics, and cloud computing.
- Enthusiast in exploring new programming languages and frameworks.
- Interest in AI/ML advancements and their applications in solving real-world problems.