Danny Hendrix

Software Architect DevOps

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SUMMARY

Software Architect with 8+ years of experience designing and implementing high-performance, reliable software for complex hardware-integrated systems. Strong in backend and full-stack development (C#/.NET, Python, HTML/JS), automated testing, and CI/CD and DevOps practices that streamline builds and deployments and reduce cycle time. Demonstrated history of leading cross-regional teams and driving performance and quality improvements in production systems and workflows.

SKILLS

Computer languages (by proficiency)

C#/.NET; Python; PowerShell; JavaScript; HTML; XML; CSS; Dart/Flutter; TypeScript; PHP; Android; SQL; Java; C++; C; Rust; Haskell

Tools & frameworks

UML; Git; Azure; Kubernetes; Docker; NuGet; Chocolatey; Puppet; pip; dotCover; dotMemory

DevOps & application management

Bitbucket; Bamboo; Jira; SonarQube; Grafana; Artifactory; BlackDuck; VS Code; Visual Studio

Soft skills

Scrum; Kanban; Stakeholder collaboration; Technical coaching

Languages

Dutch (native); English; German

EDUCATION

MSc, Computer Science — Radboud University Nijmegen, Netherlands — Aug 2015

BSc, Computer Science — HAN University of Applied Sciences, Arnhem, Netherlands — Aug 2013

EXPERIENCE

ASML Lithography

Silicon Valley — San Jose, CA — United States

Software Architect DevOps

Dec 2024 — Present

- Automated cross-repository build and installer creation, cutting a two-day manual process to a four-hour automated workflow and enabling rapid hardware testing.
- Led migration of unmanaged build scripts to version-controlled Infrastructure as Code; introduced isolated test pipelines and mandatory code reviews.
- Set up monitoring of integration pipeline using Grafana and Prometheus, enabling proactive issue detection and enhanced visibility.
- Redesigned infrastructure to enforce geopolitical access permissions.
- Introduced Scrum best practices to improve delivery cadence and stakeholder engagement.

Tech: C#/.NET; PowerShell; Python; Azure; Docker; Grafana; Prometheus; Git

Sr. Software Engineer DevOps — Team Lead

Feb 2021 — Dec 2024

- Led a cross-regional team across four development sites to standardize CI/CD and release practices.
- Built a unified PowerShell build framework with NuGet packaging to generalize builds across repositories and improve maintainability.
- Successfully migrated on-prem Windows and Linux build/test infrastructure to Azure using Docker and VM scale sets, improving scalability and reducing costs.
- Integrated SonarQube quality gates and implemented automated BOM scanning with BlackDuck for supply-chain security.
- Designed traceable delivery flows in Artifactory Edge for secure distribution to restricted customers.

`Tech: PowerShell; Azure; Docker; Artifactory; SonarQube; BlackDuck; NuGet`

Sr. Software Engineer

Feb 2020 — Feb 2021

- Product owner for software quality improvements, driving organization-wide initiatives to raise software quality.
- Facilitated agile processes and Scrum ceremonies for a cross-regional team of 14 engineers.
- Lead engineer of the C# competence group; set best practices and guided technical decisions.
- Responsible for departmental training initiatives to improve team skills and knowledge.
- Provided strategic advice on product deployment and release processes.

`Tech: C#/.NET; Azure; CI/CD; SonarQube`

Software Engineer

Apr 2018 — Feb 2020

- Designed and implemented hardware control software in .NET; introduced asynchronous scheduling to reduce overhead and increase throughput by 40%.
- Scaled software from startup-style development to high-volume manufacturing, improving reliability and maintainability.
- Introduced automated testing in simulation environments and led related training efforts.

`Tech: C#/.NET; NUnit; Simulation frameworks`

ASML Lithography

Eindhoven, Netherlands

Software Engineer

Feb 2016 — Apr 2018

- Responsible for wafer alignment software written in .NET to ensure precise and efficient operations.
- Increased wafer throughput through targeted software optimizations.
- Designed and implemented improvements to reduce wafer rejection rates.
- Led hardware control software component design and implementation and provided onsite factory support.

`Tech: C#/.NET; Hardware integration`

Philips Lighting / Embedded System Innovations by TNO

Eindhoven, Netherlands

MSc Thesis — Embedded System Innovations

Feb 2015 — Aug 2015

- Applied model-based analysis techniques to improve robustness in unreliable environments.
- Identified and fixed unexpected behavior in connected office lighting systems to improve reliability.

`Tech: Model-based analysis; Embedded systems`

Dutch Department of Law Enforcement

Arnhem, Netherlands

BSc Thesis — Search Software

Feb 2013 — Aug 2013

- Developed professional search software in Java focused on topic-based information retrieval.
- Improved topic-based search algorithm for short documents and created software to locate Twitter messages related to domestic violence.

`Tech: Java; Information retrieval; Machine learning`

Freudenthal Institute — Utrecht University

Utrecht, Netherlands

Intern

Feb 2012 — Aug 2012

- Ported mathematical learning software from Java to mobile (Android and iOS).
- Designed and implemented a formula editor for touch interfaces.

`Tech: Java; Android; iOS`

SELECTED PROJECTS

Web applications & contractor work — Multiple web applications and contract projects including a gaming league platform, and several business websites; responsibilities included full-stack development, deployment, and maintenance.

`Tech: HTML; PHP; MySQL; JavaScript; Hosting & maintenance`

TeamX (Web & Android) — Web- and Andoid- game "TeamX" using the Dart programming language.

`Tech: Dart/Flutter; Node.js`

3D Race WebGame (Custom engine) — 3d Racing webgame in Dart, including a custom build 3d engine with webGl and AI for computer-controlled players.

`Tech: Dart; WebGL; AI (behavior trees)`

High-performance 2D Webgame Engine — Webgame engine optimized for 2D rendering and handling large numbers of game objects with minimal performance impact; presented at the Dart Dev Summit, Google Munich 2016.

`Tech: Dart; Canvas/WebGL; HTML/CSS`

Haskell Compiler (Academic) — Compiler with parsing, type inference and checking for polymorphic higher-order functions to explore advanced type systems.

`Tech: Haskell; Parser combinators; Type inference`

IRMA Windows Authentication — Windows OS user authentication extension for IRMA smart-card.

`Tech: Windows APIs; Smart-card integration`

Secure Smart-card Payment App — JavaCard DreditCard application implementing secure transaction flows and cryptographic protections.

`Tech: JavaCard; Cryptography; Smart-card protocols`

CGI — Multi-modal Travel App — Android client and backend services providing route planning across transport modes.

`Tech: Java (Android); .NET; REST APIs;`

Surface Table Collaborative Drawing — Networked collaborative drawing app featuring real-time sync, conflict resolution, and multi-touch input handling.

`Tech: .NET;`

European Union Laundry Consumption Monitoring — Web app visualizing energy and water usage with exportable reports for compliance and trend analysis.

`Tech: HTML; PHP; MySQL; Data visualization`