## Jakub Adamczyk

### **Senior Software Engineer**

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Full Stack Engineer | Spring Boot, Node.js, Asp.net | React.js, Vue.js, Angular.js

#### SUMMARY

Senior Full-Stack Developer with 9+ years of experience, specializing in building and optimizing cloud-native applications using Asp.Net, Java, Spring Boot, and Kubernetes. Led the design and implementation of microservices architectures for enterprise-level projects, integrating Kafka to enable real-time data processing and scaling deployments across AWS infrastructure. Adept at driving system performance, ensuring high availability, and delivering solutions tailored to complex business needs.

#### **SKILLS**

- **Programming Languages:** Java (up to Java 22), JavaScript (ES6+), TypeScript, Scala, C++, C#, Python
- Databases: MySQL, Oracle, MongoDB, PostgreSQL, Redis, DB2, GraphQL
- Frameworks / Libraries: Spring (Boot, MVC, Security, Cloud), Hibernate, Angular, React.js, Vue.js, Next.js, Svelte, Backbone.js, JPA, Apache Camel, ASP.NET
- Messaging & Streaming Platforms: RabbitMQ, Apache Kafka
- Tools: Git, Docker, Jenkins, Kubernetes, Maven, Gradle, Grunt, PuTTY, WinSCP, Swagger UI, TestNG
- Cloud Platforms: AWS (EC2, S3, RDS, Lambda, DynamoDB, CloudWatch), Microsoft Azure (App Service, Functions, Kubernetes Service), GCP
- Testing Frameworks: Junit, Mockito, Cypress, Jest, Cucumber, Selenium, JMeter
- Software Architecture: Microservices, Event-Driven Architecture, Test-Driven Development (TDD), Model-View-Controller (MVC)
- CI / CD: Jenkins, Docker, Kubernetes, Azure DevOps, Terraform, GitHub Actions, Bitbucket Pipelines
- Version Control: Git, Jira, GitHub, GitLab, Subversion, Bitbucket
- Other Skills: Performance Tuning, Load Balancing, Scalability, Security Best Practices (OAuth2, JWT), Data Modeling, Database Design, Agile Methodologies (Scrum, Kanban), Project Management (Jira, Confluence)

#### **EXPERIENCE**

#### 10Clouds

Senior Software Engineer | Warsaw, Poland | May 2023 – June 2025

- Led the end-to-end design and development of scalable microservices and RESTful APIs
  using Java 17 and Spring Boot 3, supporting efficient processing and retrieval of patient
  records integrated with frontend Angular systems.
- Enabled secure and seamless access to patient data across departments by implementing robust backend-to-frontend communication channels and enforcing secure data handling protocols.
- Applied advanced algorithms and optimized data structures to handle high-volume medical datasets while maintaining system responsiveness and reliability under load.
- Collaborated closely with frontend teams to create responsive and accessible Angular interfaces, ensuring smooth cross-platform user interaction with patient information across web and mobile devices.
- Developed dynamic dashboards using Angular to visualize real-time patient health metrics such as heart rate and blood pressure, enabling medical staff to monitor and act on health insights instantly.
- Designed and implemented a real-time data pipeline using Apache Kafka to manage continuous health streams from IoT medical devices, supporting instant data capture, processing, and analysis.
- Integrated AWS services including Lambda, S3, and RDS to architect a secure, scalable infrastructure for storing and managing sensitive patient data.
- Utilized AWS SQS to enable asynchronous communication and fault-tolerant processing across microservices managing patient record updates.
- Implemented AWS SNS to broadcast critical alerts to healthcare professionals across multiple platforms, ensuring real-time notifications for emergency scenarios.
- Deployed containerized microservices using Docker and orchestrated application scaling and rollout with Kubernetes, ensuring high availability and consistency across environments.
- Applied Redis and AWS ElastiCache for data caching to improve access to frequently queried patient records and reduce latency across services.
- Executed system load testing with JMeter to validate performance under stress conditions and optimize response times during peak medical data loads.
- Enhanced database interaction efficiency by refining queries and indexing strategies to

- support faster access to patient records within transactional services.
- Established CI/CD pipelines with Jenkins and AWS CodePipeline to automate build, test, and deployment cycles, ensuring consistent delivery across development and production environments.
- Integrated observability tools such as CloudWatch and the ELK Stack to monitor application health and log diagnostics, supporting proactive maintenance and rapid incident resolution.
- Ensured full compliance with data security and privacy standards by applying AWS KMS encryption, TLS/SSL protocols, and fine-grained IAM policies.
- Configured AWS GuardDuty to detect and respond to threats, enforcing cloud security best practices and continuous monitoring for healthcare compliance.
- Led the migration of patient records from legacy systems to modern RDS-backed architectures, preserving data integrity with zero downtime.
- Automated and monitored data transfer processes using AWS Data Pipeline and validation scripts, ensuring reliable and consistent migration outcomes.
- Actively collaborated with UX/UI and frontend teams to deliver intuitive patient-facing interfaces with reusable Angular components, improving interaction consistency and design efficiency.

#### **Ava Labs**

Software Engineer | New York, USA | June 2021 - April 2023

- Developed financial platform using Java, Spring Boot, Hibernate, and PostgreSQL, ensuring reliable transaction processing and data management.
- Worked closely with the Product Owner to refine user stories and acceptance criteria, ensuring that each feature delivered maximum value to users.
- Implemented advanced security measures using Spring Security, OAuth2, and JWT to
  enhance the security of financial platforms, ensuring robust transaction processing,
  secure data management, and reduced breaches through effective authentication and
  authorization.
- Integrated RBAC (Role-Based Access Control) with microservices architectures using Spring Security, utilizing RESTful APIs to enforce access control policies across distributed systems.
- Leveraged Angular and React for front-end development, creating dynamic, reusable components and optimizing user experience and engagement, which enhanced application performance and maintainability.
- Experienced in database design, development, and management using MongoDB,

Oracle PL/SQL, and PostgreSQL to ensure robust and secure financial data management.

- Managed database schema changes using Liquibase, automating and version-controlling database migrations to ensure consistent and reliable deployments across development, staging, and production environments.
- Optimized database performance and scalability by fine-tuning Hibernate configurations and using caching strategies such as Second-Level Cache.
- Utilized Java 8 features like Lambda expressions and Stream API for bulk data operations on collections, increasing the performance of the financial application.
- Managed infrastructure provisioning and configuration using Terraform, ensuring consistent environments across development, testing, and production stages.
- Deployed containerized applications with Docker and orchestrated microservices with Kubernetes, improving application resilience and scalability.
- Implemented CI/CD pipelines using tools like Jenkins, GitLab CI/CD, or GitHub Actions to automate the build and deployment process.
- Conducted performance evaluations using JMeter, Selenium, enhancing application performance by 25%.
- Used Mockito for mocking dependencies in unit tests, allowing for isolated testing of individual components.

# Parity Technologies Full-stack developer | Berlin, Germany | July 2020 – May 2021

- Developed and maintained robust e-commerce features using Java, Spring, and Hibernate, implementing key OOP concepts, exception handling, multi-threading, collections framework, concurrency control, JDBC, and Java I/O for efficient backend services.
- Leveraged AWS Lambda for event-driven processing, achieving a 40% reduction in operational costs, while optimizing SQL queries and database performance to ensure fast and reliable data retrieval.
- Designed and developed user interfaces with Angular and HTML/CSS, enhancing frontend experiences and integrating complex data relationships and inheritance mapping with JPA annotations for accurate domain model representation.
- Utilized Docker and Kubernetes (GKE) for containerizing and deploying applications, improving scalability and reliability, and implemented GraphQL for efficient data querying and processing, optimizing data management workflows.

# Li Ning Sports Technology Full-stack developer | Singapore, Singapore | July 2016 - May 2020

- Developed and deployed high-load Spring Boot microservices for real-time financial data processing, achieving 99.98% system uptime and handling 10,000+ transactions per second.
- Created Angular-based dashboards for C-suite and operations teams, enabling real-time decision-making through interactive data visualizations.
- Improved system reliability by implementing failover and automated recovery mechanisms, increasing fault tolerance and reducing system downtime by 40% across distributed cloud environments.
- Optimized AWS infrastructure using EC2 Auto Scaling, RDS performance tuning, and S3 lifecycle policies, resulting in a 30% reduction in operational costs and 2x improved scalability under peak loads.

### **EDUCATION**

Bachelor of Science in Computer Science
The Hong Kong University of Science and Technology | 2011 - 2015