Ivan Battimiello

Teach & Team Lead | Senior Full-stack & DevOps Engineer | Solution Builder

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Full-stack Engineer with extensive experience in software development, specializing in leading Backend and DevOps roles. Successfully led Backend initiatives and managed cloud infrastructure, optimizing performance for FinTech, public administration, e-commerce, and digital media projects. Proficient in Java, Python, Go, Node.js, JavaScript, Angular, Database Design, Systems Design, Version Control, and Team Management, with a strong focus on architecting scalable platforms and secure infrastructure using Docker, Bash, Kubernetes, and AWS. Efficiently integrated multiple payment providers and securely managed authentication and authorization systems using OAuth, SSO, and JWT. Aims to leverage expertise in cloud infrastructure and CI/CD pipelines to enhance efficiency and performance. Adept at mentoring teammates through collaboration, code reviews, and providing strategic guidance to ensure best practices. Experienced in deconstructing user stories and managing sprint estimations, enhancing team performance, ensuring deadline accuracy, and continuously studying and exploring new technologies, with a strong willingness to learn and expand my skill set.

Skills

- Programming Languages: Java, Python, Go, Node.js, C++, C#, PHP
- Frameworks: Spring (MVC, Boot, Security, Data, Cloud), Flask, Express, Laravel
- Databases: SQL, PL/SQL, PostgreSQL, MySQL, Oracle, Redis, JDBC
- Payment Providers: PayPal, Stripe, Shift4, RS2, Worldpay, Klarna, CoinGate
- Brokers: RabbitMQ, Redis, Kafka
- ORMs: JPA, Hibernate, SQLAlchemy, Sequelize, MikroORM, Eloquent
- CMS: Liferay, WordPress
- VCS: Git, GitHub, GitLab, BitBucket
- Web Servers: Nginx, Tomcat, Apache, Weblogic
- **DevOps Tools**: Docker, Kubernetes, Kustomize, Jenkins, AWS (VPC, EKS, ECR, S3, IAM, EC2, RDS, SNS, SES, Lambda, CloudFront, Inspector, WAF, CloudTrail, CloudWatch, ALB), eksctl, Terraform, Fastlane, Hetzner, CI/CD pipelines, Helm, IaC, Google Cloud (GCP), FluxCD, Unleash, Flagsmith, Oracle Cloud, OCI
- Web Technologies: HTML, CSS, JavaScript, TypeScript, Angular, AngularJS, JSP, JSF, PrimeFaces, WebSocket, Gatsby, React
- Software Design & Modeling: UML, OWASP, TDD, BDD, SOLID, Design patterns, OAuth2, SSO, JWT, Distributed Systems, Feature Flag, REST, Microservices, Monolithic, SOAP, PoLP, IaC, DevSecOps
- Scripting: Bash, Makefile, PERL, Ruby, RegEx, Groovy, BrightScript
- Testing: JUnit, Pytest, PHPUnit, Selenium, Unit test, Feature test, Integration test
- Operating Systems: Linux, Windows, MacOS, Android, IOS
- Mobile: React Native, Fastlane, ADB, Android Studio, Xcode, App Store, Google Play Console
- Game Development: Unity, OSVR, VICON, VRPN
- AI: TensorFlow
- Blockchain: Solidty, web3.js, openZeppelin, Truffle
- Methodologies: Agile
- Other Tools: REST API tools, Postman, IntelliJ, Visual Studio, Matlab, Maven, Gradle, NPM, JSON, TizenOS, Confluence, JIRA

Experience

Amaris

January 2025 - Present

Naples, Italy

Senior Backend & DevOps Engineer - Full-time

Project: Provided consulting for Flutter SEA at Sisal for the PokerStars platform; it offers modern poker gaming, combined with dedicated training content, live casino tables powered by Evolution Gaming, and responsible gaming tools.

- Managed OAuth2 and JWT-based authentication, user registration, and asynchronous job scheduling for Java applications across 4+ countries. Worked with Oracle databases, promptly resolving bugs and issues to ensure a smooth, reliable, and high-performance workflow.
- Rewrote legacy Java 1.7 code using Spring Boot and modern technologies; leveraged Spring Cloud for service orchestration and applied contemporary design patterns to ensure clean, high-performance code.
- Designed the migration strategy for transitioning WebLogic-based applications to Apache TomEE for deployment in Kubernetes clusters. Successfully migrated over 7 projects, delivering a fast, scalable solution with a clear and effective execution plan.

Lasting Dynamics

Project: <u>GiveCorporation</u> is a Fintech application that provides custom fundraising and crowdfunding software, enabling any non-profit, individual, or politician to use their own fundraising platform.

- Served as Technical Leader, managing and mentoring an 8-member cross-functional team to deliver high-quality solutions that met PCI-DSS compliance. Spearheaded customer meetings and technical requirements sessions, ensured accurate project estimations, and made decisive choices regarding technology stack and project direction, consistently driving effective and secure outcomes.
- Developed new features using Go and PostgreSQL, including integrating payment providers like Worldpay and RS2, designing new REST services, and optimizing API performance, all while adhering to OWASP Top 10 security principles.
- Managed AWS-hosted infrastructure environments, leveraging Kubernetes, Kustomize, and FluxCD to ensure high performance, scalability, and resilience. Enhanced security and observability by implementing CloudWatch and CloudTrail for centralized logging and monitoring, WAF for threat protection, and Inspector to identify and remediate image vulnerabilities promptly. Optimized delivery and user experience using CloudFront for CDN caching, Application Load Balancers (ALB) for efficient traffic distribution, and RDS for reliable database management. Supported fast messaging and email delivery with SNS and SES services, maintaining a secure and robust cloud ecosystem aligned with best practices.
- Managed a queue job system utilizing Redis, ensuring efficient asynchronous task execution and scheduled operations with cron.
- Conducted detailed code reviews as a GitHub code owner, enhancing error identification and improving code quality.
- Created comprehensive documentation to facilitate efficient onboarding and knowledge sharing within the development team.
- Wrote comprehensive unit and feature tests for each implemented feature, enhancing software stability and improving error detection.
- Integrated feature flags via FlagSmith, enabling rapid, controlled rollout and rollback of application components. Leveraged dynamic toggling to swiftly disable or activate features in response to production issues, ensuring system stability and minimizing user disruption.
- Managed the CI/CD pipeline using EKS, Docker, Jenkins, Bash, FluxCD, and ECR, ensuring seamless continuous deployment.

Project: Migrate the company's custom, outdated Kubernetes cluster on Hetzner to the latest version.

- Led the migration of over 9 Kubernetes namespaces, comprising more than 50 services, ensuring a seamless transition and maintaining operational stability.
- Backed up all sensitive information on S3, including databases, to ensure data integrity and prevent potential data loss.
- Collaborated closely with teammates through structured and organized planning, ensuring adherence to deadlines and balanced workloads

Project: Secure the existing AWS company infrastructure.

- Acted as a Team Leader, providing strategic guidance, support, and effective management to ensure the successful completion of tasks.
- Applied the Principle of Least Privilege (PoLP) for over 20 users, restricting permissions to only what was necessary.
- Backed up resources, including RDS databases, S3 buckets, and volumes.
- Updated the EKS cluster to the latest version to keep the software up to date and reduce costs.
- Removed unused data, including ECR repositories and volumes, to maintain a cleaner overview and lower costs.
- Used IAM Identity Center for improved security and access management.

Project: Sankaku is a manga community platform.

- Developed complex features in Node.js and, as a team leader, guided the team toward successful task completion, fostering collaboration and delivering high-quality results.
- Integrated new payment processors such as Shift4 and CoinGate for both fiat currencies and cryptocurrencies, doubling revenue through an optimized payment and subscription system; Managed the OAUTH2 authorization and SSO JWT-based authentication flow, providing a seamless authentication and fast user experience.
- Managed a large-scale database supporting a user base of over two million, ensuring optimal security and performance at all times.
- Managed a sophisticated job system with Redis, enabling efficient asynchronous worker execution for resource-intensive operations on a scheduled timeline.
- Created detailed technical documentation, including UML diagrams, to support project understanding and development for both developers and clients.
- Implemented and managed the staging infrastructure and the custom CI/CD pipeline using Kubernetes, Docker, and Bash scripts, ensuring consistent deployments and reliable service performance.
- Built the entire Kubernetes staging infrastructure from scratch, initially on AWS, and later migrated to the custom Hetzner cluster.

- Created numerous Bash scripts to empower non-DevOps users to resolve issues quickly.
- Coordinated a 5-member cross-functional team, offering coding support and resolving bottlenecks to ensure smooth project progress.

Project: An internal software to automate the processing of invoices submitted by employees.

- Implemented a filter on Zoho Mail to detect specific email subjects and automatically upload matching emails to Dropbox.
- Developed the main software using Node.js and Express that monitors a Dropbox folder via Dropbox APIs, then triggers an email through Amazon SES to the designated service for invoice processing.

Project: Vetrinalive is an easy e-commerce site creation for shop owners

- Led a 7-member team in developing, guiding, and managing the creation of new features using PHP, Laravel, PostgreSQL, and Docker, ensuring effective collaboration and project success.
- Integrated multiple payment providers, including PayPal, Stripe, and Klarna, boosting successful transaction rates by 60%. Developed comprehensive unit and feature tests with PHPUnit, improving code quality and reducing bugs by 70%.
- As the Technical Leader, collaborated with the customer to gather and define requirements, provided clear and accurate estimations, and consistently supported the team in achieving project goals.
- Managed the staging environment on a custom Kubernetes cluster hosted on Hetzner and the production cluster on AWS, ensuring smooth transitions and reliable deployments across environments.
- Oversaw the CI/CD pipeline across both staging and production clusters for over 9 projects, utilizing BitBucket webhooks, Jenkins, Kubernetes, Docker, EKS, EC2, and ECR, ensuring efficient and reliable deployments.

Project: Omne is a 360º lifestyle app that multiplies user engagement with its innovative features.

- Deployed custom services on AWS using EKS for some application features.
- Developed a CI/CD pipeline to automate Android and iOS app deployments to their respective stores, utilizing Kubernetes, Fastlane, Bash, Ruby, Jenkins, and GitHub Actions for rapid, on-demand deployments.

Project: Enpacl is an application that provides and manages social security benefits. (Google Play, App Store)

- Backend point of contact for managing and integrating tools such as OneSignal for push notification management.
- Developed authentication features in React Native, including SPID and CIE, which are Italian identity verification methods.
- Automated the app deployment process to respective stores using Ruby, Fastlane, and Bash scripts, ensuring efficient and consistent releases

Project: Vetrinaverse is a platform that transforms e-commerce with blockchain technology.

- Developed an NFT generation system in Python, categorizing items into common, rare, and legendary based on custom traits.
- Designed and deployed smart contracts on the blockchain using Solidity and Web3, enabling secure interactions and functionality.

Project: <u>Diagnostic Biochips</u> offers intuitive and powerful neural probes, designed to support research in electrophysiology.

- Developed new backend features in Python using Flask, PostgreSQL, Docker, and S3 for uploading large data files, significantly improving upload speed by 83%.
- Created unit and feature tests using Pytest, ensuring high-quality code with reduced error rates.
- Managed worker nodes using RabbitMQ and Celery to offload intensive tasks, ensuring efficient and reliable asynchronous execution.
- Managed and supported staging and production infrastructures on AWS, leveraging core services such as EC2, S3, EKS, ECR, and IAM, while maintaining a strong focus on security, reliability, and operational excellence.
- Supervised and optimized the CI/CD pipeline with BitBucket webhooks, Jenkins, Kubernetes, Docker, and ECR, ensuring efficient and automated deployments.

Netcom Group

October 2016 - September 2021

Team Lead / Full-stack Engineer - Full-time

Naples, Italy

Project: District Tourists is an application that manages apprenticeship practices across various districts in the "Regione Campania."

- Led the development of a 5-member team using Java 13, Spring Boot, Hibernate, Angular 12, and MySQL, fostering excellent team collaboration and delivering outstanding results.
- Developed high-performance APIs and implemented a secure JWT-based authentication flow, significantly improving efficiency and reducing user login time.
- Used the Leaflet JavaScript library to create a custom map displaying all required districts, improving map quality and significantly enhancing the user experience.

Project: Bloomove is an application that manages and provides services for a fleet of cars (Bloomfleet)

• Led the development of complex and qualitative REST API microservices using Java 11 with Spring Boot and MySQL, significantly improving performance and scalability.

- Managed asynchronous tasks with RabbitMQ, ensuring successful task consumption and reliable processing.
- Manipulated Well-Known Text (WKT) to represent spatial data on Google Maps, enhancing data visualization and enabling precise area selection.
- Managed a 6-member cross-functional team and the API synchronization between multiple companies.

Project: ForME is a management platform that manages users participating in training and various webinars.

- Developed the management platform using Liferay 7, Java 8, MySQL, and JSF, ensuring fast APi performance and an easy deployment process.
- Managed and supported the team to successfully achieve tasks and foster collaboration.

Project: Designed and implemented a responsive dashboard for Vodafone to summarize automated test results, delivering efficient data visualization and management for enhanced decision-making.

- Developed using AngularJS, Java 8, Spring Boot, and MySQL, integrating backend and frontend components seamlessly.
- Provided real-time insights into testing outcomes to support quality assurance processes.

Project: Two portals for the "Regione Campania" public administration to manage apprenticeship contracts and announcements.

- Engineered both portals on the Liferay platform using its portlet-oriented architecture, resulting in streamlined processes and increased user engagement.
- Developed a seamless API using Java and MySQL, with an intuitive interface built in JSF.

Project: The admin panel for the renowned "Museo Castelnuovo", designed to manage visitor entrance and exit times as well as the battery status of the tablets provided for the audioguide.

- Developed the entire panel using Java 8, Spring MVC, Hibernate, HTML, CSS, JavaScript, JSP, and MySQL.
- Managed battery status using ADB tools to monitor battery levels from the device.
- Utilized WebSocket for real-time updates, enhancing user experience, and providing improved control over tablet status.

Project: A native Android application for the "Museo Castelnuovo", to recognize a set of statues and paintings through neural networks.

- Developed the mobile application using Android Studio and Java.
- Trained neural networks using TensorFlow, achieving fast and accurate recognition.

Project: A framework to simplify Selenium usage.

- Created an easy-to-use framework in Python based on Selenium, enabling non-developers to write tests effectively for an insurance company.
- Utilized Pytest to develop effective automated test cases, ensuring robust functionality and reliability of the framework.

Project: Developed and enhanced features for the <u>Roku</u> streaming platform using BrightScript, improving video playback quality and overall software performance for a seamless user experience.

- Utilized BrightScript, Roku's proprietary scripting language, to implement core application features.
- Optimized video streaming performance and responsiveness on Roku devices.

Project: A first-person educational game designed to replicate real-world scenarios, providing users with an engaging experience through descriptive UI and smooth interactions.

- Developed a custom parser in Perl to convert OBJ files for OpenGL, enabling efficient 3D data processing.
- Created dynamic importing of Wavefront OBJ models into Unity to build realistic virtual environments.
- Implemented first-person navigation in Unity with C# scripting, incorporating VR functionality using Google Cardboard for immersive user interaction.

Project: Collaboratively developed the <u>Campania Artecard</u> website, a digital platform providing access to cultural attractions across Naples and Campania, enhancing visitor engagement through streamlined access and rich content.

- Worked within a 5-member team using PHP and Drupal CMS to build and maintain the site.
- Integrated features enabling users to select passes for museums, archaeological sites, and transport.
- Ensured responsive design and smooth user experience across devices.

Project: Developed diverse internal software solutions spanning web platforms, smart TV apps, and mobile applications to streamline company operations and enhance user accessibility.

- Built a platform for managing incoming protocols (mails and scans) using Liferay, Java 8, MySQL, JSP, and Ajax to automate internal workflows.
- Created a Samsung TizenOS Smart TV app with JavaScript, HTML, CSS, and jQuery, optimizing the interface for large-screen TV interaction.
- Developed a mobile Android app in Java 8, integrating the company's radio web application within a web view, improving mobile accessibility.

Project: Worked on a project that aimed to emulate virtual reality input devices.

- Implemented a simulator in C++ that emulates virtual reality input devices, such as controllers like the VICON APEX, virtual reality HMD, or other virtual reality joysticks, using the VRPN (Virtual Reality Protocol Network).
- Developed a real-time simulation scene in Unity 3D using Perl and C#, integrating real-time input from the C++ software mentioned above.
- Set up the VICON motion capture system, including calibration of IR Bonita cameras and custom object tracking by retroreflective markers.

Education

University of Naples Federico II

March 2017

Bachelor's degree, Computer Science

Naples, Italy

Principal subjects: Mathematics, Algebra, Physics, Geometry, Programming (C/C++, Java, SQL, PL/SQL, UML), Architecture of calculators, Database, Informative multimedia systems (Theory of image/video/audio processing and GPS operating principles), Algorithm and data structures, Operating systems (Linux, low-level C), Statistics, Computer Networks, Computer Theory, Software Engineering.

Thesis title: Simulation of input virtual reality devices utilized in a training platform environment.

Certifications

• PC Software and Hardware Assistance

December 2013

Languages

• Italian: mother tongue

English: C1Spanish: A2

Available to relocate.

In compliance with the GDPR and the Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize you to use and process my details contained in this document.