MARIAN ALEXANDRU DIACONU

Software Engineer | Project Manager

BACKEND ENGINEER | CLOUD COMPUTING ENTHUSIAST | ENTREPRENEURIAL MINDSET | GROWTH FOCUSED

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ABOUT ME

Experienced mid/senior software engineer specializing in AI-centric software and beyond. Over the years, I have honed my ability to independently oversee projects, from initial research to successful deployment. My primary aim is to continuously refine my skills, with a strong focus on developing software that consistently delivers value to customers in an agile and dependable manner. My long-term aspiration is to leverage this expertise towards launching my own company or innovative product in the future.

EXPERIENCE

01/2022 – present

Software Engineer | Project Manager
Bluetensor, Trento, IT

Self Employed | Freelance

- Managed AI-centered projects focused on Natural Language Processing (NLP).
- Collaborated with clients to define requirements using Software Engineering tools like UML diagrams, enhancing communication between clients and the production department.
- Translated project requirements from formal documents to tasks, stories, and epics using ticketing systems such as Jira, simplifying project planning.
- Led the NLP team through regular alignments, discussions, and retrospectives, fostering better engagement in project design and development.
- Executed software releases via automated CI/CD pipelines and maintain version control to monitor development and release processes.
- Conducted periodic alignment meetings with customers using CHANGELOG files and Canvases to improve communication and customer understanding.
- Supported the development team by researching and prototyping new techniques and tools, resulting in improved feature implementations.
- Assisted the NLP team with development tasks to expedite the development process.

Technologies used: UML | JIRA | DIAGRAMS.NET | SOFTWARE ENGINEERING | PYTHON | DJANGO | MACHINE LEARNING | NLP

05/2022 – 12/2022

Software Engineer
Bluetensor, Trento, IT

Self Employed | Freelance

- Designed, developed, and maintained AI-centered projects in Natural Language Processing (NLP) and other industries such as the Insurance Industry.
- Adapted client interactions to Agile methodologies, streamlining project planning and delivery processes.
- Implemented new features using Agile methodologies to enhance project delivery speed.
- Improved monitoring techniques for efficient software production maintenance.
- Designed, developed, and maintained Cloud Infrastructure components and Continuous Integration Pipelines to expedite the release process.
- Created a Machine Learning Experimentation environment to facilitate testing and validation of solutions.
- Deployed MLOps tools for model tracking, integration, and delivery, accelerating ML model development and integration.

Technologies used: PYTHON | DJANGO | DOCKER COMPOSE | AWS CLOUD | ANSIBLE | MLFLOW | BITBUCKET | NLP

| 09/2020 – 04/2022 | **Software Engineer** | Self Employed \| Freelance |
| | Fraudio, Amsterdam, NL | |

Supported Fraudio Fraud Detection System with engineering activities such as:

· Designed and developed ML model artifacts for standardized model shipment.

· Implemented configuration-based ML model selection for deploying multiple models on the same machine.

· Conducted ML model deployment and alignment tests based on data scientists' expectations to ensure production correctness.

· Developed procedures for deploying large data volumes into in-memory databases to support complex ML models.

· Added new features to ML model serving applications, including authentication and authorization mechanisms.

· Created web APIs to efficiently collect and process data for ML model training.

· Documented API Gateway and Integrations for easier customer integration.

· Automated DevOps processes through CI/CD.

· Managed incidents and performed application debugging.

Technologies used: SCALA · PYTHON · PLAY FRAMEWORK · SPARK · DATABRICKS · KUBERNETES · AIRFLOW · GOOGLE CLOUD · GITLAB

| 03/2020 – 09/2020 | **R&D Software Engineer** | **Internship** |
| | Fraudio, Amsterdam, NL | |

· Conducted research on innovative distributed serverless caching systems for small objects management that could reduce hosting costs from 31x to 96x

· Developed a master's dissertation on this thesis.

· Migrated Infinicache from AWS Lambda to KNative.

Technologies used: GO · KNATIVE · KUBERNETES · AWS LAMBDA · GIT

| 04/2018 – 09/2018 | **Full-stack Developer** | **Full-time** |
| | Edutech, Trento, IT | |

· Replaced Shareable Content Object Reference Model (SCORM) with Experience API (xAPI) in Edutech's Learning Management System (LMS), enhancing competitiveness in the market.

· Designed and developed utility software services independently and in coordination with the team.

Technologies used: ASP.NET · ANGULAR · JAVASCRIPT · JQUERY · AJAX

| 06/2017 – 04/2018 | **Full-stack Developer \| Research Assistant** | **Internship** |
| | Fondazione Bruno Kessler, Trento, IT | |

· Designed, developed, and tested CoachAI, a platform consisting of a conversational assistant and a management platform for monitoring patients' progress through chatbot data.

· Developed a bachelor thesis on this project.

· Participated in user-centered testing sessions and developed conversational agents to support research project improvements.

Technologies used: RUBY ON RAILS · JAVASCRIPT · JQUERY · AJAX · TELEGRAM BOT API

EDUCATION

M.Sc. in Computer Science
Software and Service Architectures
University of Trento

B.Sc. in Computer Science
Computer Science and Technology
University of Trento

SOFT SKILLS

📅 **Organisational**
Autonomous, adaptable, outside the box thinker.

💬 **Communication**
Effective communicator and team worker.

🏃 **Aptitude**
Positive, precise.

LANGUAGES

Italian — Native

Romanian — Native

English — Fluent

SKILLS, TOOLS & PLATFORMS

☑ Technical knowledge

Skill	Rating
Algorithms	●●●●○
Distributed Systems	●●●●○
Cloud Computing	●●●●○
Software Engineering	●●●●○
Agile Methodologies	●●●●○
Prototyping	●●●●○
Software Architectures	●●●○○
Machine Learning	●●●●○

☑ Programming languages

Skill	Rating
SQL	●●●●●
Python	●●●●○
Java	●●●○○
Scala	●●●○○
Bash	●●●○○
Ruby	●●●○○
Javascript | Typescript	●●○○○
C#	●●○○○

☑ Markup Languages

Skill	Rating
HTML	●●●●○
XML	●●●●○
CSS	●●●○○
Latex	●●○○○

☑ Databases

Skill	Rating
Redis	●●●○○
Postgresql	●●●○○
SQLite	●●●○○
Kafka	●○○○○

☑ Frameworks

Skill	Rating
Django	●●●●○
Play Framework for Scala	●●●●○
Ruby on Rails	●●●●○
ASP.NET	●●○○○
Angular	●●○○○
Java Servlets with JSP	●●○○○
Node.js with Express	●●○○○

☑ Platforms and server technologies

Skill	Rating
Docker and Docker Compose	●●●●○
Linux	●●●●○
Kubernetes	●●●○○
Spark	●●●○○
Airflow	●●○○○

☑ Development Tools

Skill	Rating
Git	●●●●○
Gitlab CI/CD Pipelines	●●●○○
Bitbucket CI/CD Pipelines	●●●○○
SBT	●●○○○

☑ Cloud Services

Skill	Rating
Google Cloud	●●●○○
AWS	●●●○○
Terraform	●○○○○