



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

01/2023 – 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 maintained 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.
- Designed software solutions to several customer problems resulting in reusable libraries.
- Assisted the NLP team with development tasks to expedite the development process.

Technologies
used:

AWS CLOUD PYTHON DJANGO MACHINE LEARNING NLP UML

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:

AWS CLOUD DOCKER COMPOSE ANSIBLE PYTHON DJANGO MLFLOW
BITBUCKET NLP

09/2020 – 04/2022 **Software Engineer**
Fraudio, Amsterdam, NL

Self Employed | Freelance

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:

KUBERNETES | GOOGLE CLOUD | SPARK | DATABRICKS | AIRFLOW | MLFLOW
SCALA | PYTHON | PLAY FRAMEWORK | GITLAB

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

Internship

- 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:

KNATIVE | KUBERNETES | AWS LAMBDA | GO | GIT

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

Full-time

- 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 | EXPERIENCE API

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

Internship

- 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

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

✓ Markup Languages

HTML	● ● ● ● ●
XML	● ● ● ● ●
CSS	● ● ● ● ●
Latex	● ● ● ● ●

✓ Frameworks

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

✓ Development Tools

Git	● ● ● ● ●
Gitlab CI/CD Pipelines	● ● ● ● ●
Bitbucket CI/CD Pipelines	● ● ● ● ●
SBT	● ● ● ● ●

✓ Programming languages

SQL	● ● ● ● ●
Python	● ● ● ● ●
Java	● ● ● ● ●
Bash/Shell	● ● ● ● ●
Scala	● ● ● ● ●
Ruby	● ● ● ● ●
Javascript Typescript	● ● ● ● ●
C#	● ● ● ● ●

✓ Databases

Redis	● ● ● ● ●
Postgresql	● ● ● ● ●
SQLite	● ● ● ● ●
Kafka	● ● ● ● ●

✓ Platforms and server technologies

Docker and Docker Compose	● ● ● ● ●
Linux	● ● ● ● ●
Kubernetes	● ● ● ● ●
Spark	● ● ● ● ●
Airflow	● ● ● ● ●

✓ Cloud Services

Google Cloud	● ● ● ● ●
AWS	● ● ● ● ●
Terraform	● ● ● ● ●

I authorize the processing of my personal data present in the curriculum vitae pursuant to the Italian Legislative Decree 30 June 2003, n. 196 and of the GDPR (EU Regulation 2016/679).