MARIAN ALEXANDRU DIACONU

Software Engineer | Project Manager

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

- /diac-marian
- /neboduus
- marianalexandrudiaconu@gmail.com
- +39 340 51 24 016

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, developed and tested 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** | **Self Employed | Freelance** |

Software Engineer
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:
KUBERNETES | GOOGLE CLOUD | SPARK | DATABRICKS | AIRFLOW | MLFLOW
SCALA | PYTHON | PLAY FRAMEWORK | 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:
KNATIVE | KUBERNETES | AWS LAMBDA | GO | 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 | EXPERIENCE API

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

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

✅ Programming languages

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

✅ Markup Languages

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

✅ Databases

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

✅ Frameworks

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

✅ Platforms and server technologies

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

✅ Development Tools

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

✅ Cloud Services

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