# **Miguel Dias**

# **SOFTWARE ENGINEER**

Berlin, Germany (+351) 910873042 I miguel@migueldias.eu I linkedin.com/in/migueldiaseu

# **Summary**

I drive Continuous Improvement by helping teams align day-to-day work with customer value and organizational goals.

I conduct Value Stream Mapping workshops to improve Software Delivery processes, leading to faster deployments, higher quality, and reduced downtime for customers.

To achieve these benefits, I leverage my diverse background in DevOps, Cloud Infrastructure, Data Engineering and Analytics, in large organizations, startups, and nonprofits.

#### **Technical Skills**

• Programming: Python, Java, Kotlin, C, SQL, MongoDB, R

- · Data Science: Jupyter, Pandas, NumPy, scikit-learn, spaCy, Matplotlib
- · Data Engineering: Snowflake, Airflow, Digdag, Spark, Kafka
- Web Development: HTML/CSS/JavaScript, Nginx, Flask, FastAPI, Django, Django REST framework, Streamlit
- DevOps & Cloud: Docker, Kubernetes, AWS, Azure, GCP, Terraform, DataDog, Grafana

#### **Work Experience**

#### **RELEX Solutions, Berlin**

LEAN MANAGEMENT CONSULTANT

Oct 2022 - Jun 2024

- Added measurable value by
  - Reducing Deployment Lead Time in Project A by 64%, from 28 days to 10 days
  - Reducing Deployment Lead Time in Project B by 68%, from 22 days to 7 days
- · Improving collaboration across different teams.
- · Helping multiple teams to identify and remove main bottlenecks in delivering value to customers.
- End-to-end visualization and measurement of the software delivery process.
- · Alignment of teams towards the common goal of delivering increased customer value.

# **RELEX Solutions, Lisbon**

CLOUD INFRASTRUCTURE ENGINEER

Oct 2022 - Jun 2024

- Automated Cloud Provisioning: Developed a Django application to automate cloud infrastructure setup with Terraform and Python, enhancing the migration process and deployment efficiency.
- Cloud Monitoring Implementation: Deployed an Azure-based logging pipeline with Event Hub, Functions, and Datadog, enhancing operational oversight and response capabilities.
- Cost-Efficient Data Transfer: Orchestrated the design of a file pull/push solution using Azure Data Factory, optimizing data transfer costs and efficiency across multiple cloud platforms. Conducted comprehensive cost-analysis to maximize client savings.

• Collaborative Team Culture: Contributed to a team environment that values listening, consensus-building, and collaboration.

# Lisbon Data Science Academy, Lisbon

LEAD DEVOPS ENGINEER (900+ STUDENTS)

Mar 2022 - Jan 2023

- Managed a DevOps team, improving infrastructure with Django, Kubernetes, and AWS.
- · Built and deployed tools for students using Python, FastAPI, and Docker.
- Developed a Django REST framework API to collect student submissions, presented in a Django-based dashboard, deployed to AWS Fargate.

#### **DEVOPS ENGINEER**

Mar 2020 - Mar 2022

- Authored a comprehensive guide on setting up a professional Python development environment, providing ongoing support to students.
- Implemented CI/CD pipelines for testing, releasing, and automatic grading of learning materials.

#### DATA SCIENCE INSTRUCTOR

Mar 2020 - Jan 2023

- Oversaw a team of data scientists in creating and deploying educational content and tools, offering support to students.
- Designed and conducted a Data Wrangling for Machine Learning Specialization hackathon.
- Provided mentorship during hackathons, assisting students with technical and machine learning inquiries.
- Conducted quality assurance for the Python Prep Course materials, ensuring high educational standards.

#### DareData, Lisbon

DATA ENGINEER - AICEP

March 2022 - June 2022

- Developed a web application to process and search documents, with NLP and Computer Vision, achieving a 75% increase in document availability for search with Elasticsearch.
- Wrote ETL processes with Airflow on Google Cloud Composer.
- · Deployed neo4j and Elasticsearch services to GCP.
- Performed cost and feature analysis of different source control providers.

#### DATA ENGINEER - NOS

Nov 2021 - April 2022

- Built data ingestion pipelines using a bespoke framework with Oracle SQL, bash, Hive.
- Facilitated cross-team knowledge sharing, creating learning materials that reduced Data Engineer's onboarding time by 3 months.

#### **Bond Touch, Lisbon**

### DATA SCIENTIST/ENGINEER

Feb 2020 - July 2021

- Mined data for insights to drive product decisions, managing a Data Warehouse with AWS EC2, Firehose, S3, Snowflake, and Terraform.
- Developed data collection on Android devices and cloud infrastructure for data reception.

- Built Data Marts to serve specific business use cases, working closely with product and marketing teams for reports and dashboards.
- Deployed a company-wide business intelligence solution (Chartio) and defined Key Performance Indicators with decision-makers.
- Applied NLP to customer surveys and built an internal tool for Customer Support using Django, MongoDB, SQL, AWS ECS, Fargate, and Terraform.

## Mobipium, Lisbon

INTERN DATA SCIENTIST

Jan 2019 - Apr 2019

 Built a Machine Learning pipeline on AWS EC2 to predict Key Performance Indicators for advertising campaigns.

#### **Education**

### University of Lisbon, Lisbon

GRADUATE WORK TOWARDS MASTERS IN DATA SCIENCE

Sep 2018 - Dec 2019

- Engaged in advanced studies in Data Science, including cloud computing and machine learning.
- Developed a Kubernetes cluster on GCP, enhancing the performance of reinforcement learning algorithms.

BACHELORS IN SOFTWARE ENGINEERING

Sep 2014 - Jul 2019

• Completed a comprehensive curriculum in software engineering with a focus on security, reliability, and software architecture patterns.

#### Lisbon Data Science Starters Academy, Lisbon

DATA SCIENCE BOOTCAMP

Jul 2019 - Mar 2020

- Acted as a "Student QA" in the Quality Assurance process for learning units, ensuring the accuracy and clarity of educational content.
- Mastered practical exercises and projects in Binary Classification, Data Wrangling, Time Series Forecasting, NLP, and Recommender Systems.
- Collaborated in five 6h-long team-based hackathons, tackling real-life industry problems with Machine Learning, which honed problem-solving and teamwork skills.

#### **Projects**

### **Jobs Dashboard**

Nov 2020 - Feb 2021

 Developing a Web Scraping and reporting tool for job market analytics, utilizing Digdag, Nginx, AWS EC2, and Terraform.

## **Magic the Gathering Analytics**

Oct 2019 - Dec 2019

Created a dashboard for collectors, scraping data with Python, storing in PostgreSQL, and deploying with Flask and Apache.

Languages

- Portuguese (Native)English (Fluent)
- German (A1)
- French (A1)