Mateus M. Furquim Mendonça

Machine Learning and Software Engineer

@mfurquimdev@gmail.com git mfurquimdev in/mfurquimdev mfurquim.dev Brazil

Professional Summary

Highly skilled software engineer with over 9 years of experience and a diverse background. Committed to team growth and innovation through effective mentoring and collaboration. Strong problem-solving skills with a passion for delivering high-quality software solutions.

Work Experience

Back-end Developer

Jan 2021 – Present

DevGrid United Kingdom (Remote)

Managed several microservices that employ machine learning algorithms to estimate house appliances' energy consumption.

- Achieved up to 59% improvement in **Python** write operations on **Cassandra** through the safe utilization of unlogged batches.
- Iteratively improved domain models following **Domain Driven Design** approach, increasing efficiency in delivering new features.

Embedded Software Developer

Nov 2019 – Aug 2020

Autotrac Brasília, DF - Brazil

Maintained security and logistic features of an embedded system for a customized hardware and Linux kernel.

- Employed dependency injection and other **SOLID principles** to enhance **C++** code quality and maintainability.
- Implemented **monitoring** solutions to gather real-time performance data, ensuring optimal system efficiency and responsiveness.

DevOps Consultant

Jan 2019 – Nov 2019

IBM Brasília, DF - Brazil

Collaborated with multiple teams to improve observability of the back-end services of a prominent banking institution.

- Contributed to self-discovering services feature using **etcd** key-value store, **consistent hashing** and a **federation of Prometheus**.
- Employed **PromQL** to develop alerts that detected low performance of new deployments and potential DDoS attacks.

Intern Experience

Education

Online Nov 2021 – Dez 2022

Languages

Ligature A merged glyph.
Kerning A spacing adjustment between two adjacent letters.

In this report, we will explore the various factors that influence fluid dynamics in glaciers and how they contribute to the formation and behaviour of these natural structures.

Sub Heading

1. The climate
   - Temperature
   - Precipitation
2. The topography
3. The geology

The equation $Q = \rho A v + C$ defines the glacial flow rate.

The flow rate of a glacier is defined by the following equation:

$$Q = \rho A v + C$$

The flow rate of a glacier is given by the following equation:

$$Q = \rho A v + \text{time offset}$$

Total displaced soil by glacial flow:

$$7.32\beta + \sum_{i=0}^{\nabla} \frac{Q_i}{2}$$

Total displaced soil by glacial flow:

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$$7.32\beta + \sum_{i=0}^{\nabla} \frac{Q_i(a_i - \varepsilon)}{2}$$

$$v := \begin{pmatrix} x_1 \\ x_2 \\ x_3 \end{pmatrix}$$

$$a \rightsquigarrow b$$

Number: 3

$-x$ is the opposite of x

let name = [**Typst!**]

parbreak()

strong *emphasis* `print(1)` **https://typst.app/**

Heading

- item

1. item

Term description

x^2

‘single’ or “double” , —

Tweet at us #ad ,

x^2

x^2

$x_1\ x^2\ 1 + \frac{a+b}{5}\ \overset{x}{y}$