MATEUS M. FURQUIM MENDONCA

Machine Learning Engineer & Backend Developer

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EXPERIENCE

Machine Learning Engineer   DevGrid

📅 Jan 2021 – Present   📍 Remote

Maintained over 20 microservices that employ machine learning algorithms to estimate the energy usage of household appliances.

> Successfully improved the write performance of a **NoSQL** database by up to 59% through the safe utilization of unlogged batches.

> Enhanced code maintainability by achieving over 80% unit test coverage and adhering to **SOLID principles** principles

Embedded Software Developer   Autotrac

📅 Nov 2019 – Aug 2020   📍 Brasilia, DF - Brazil

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DevOps Consultant   IBM

📅 Jan 2019 – Nov 2019   📍 Brasilia, DF - Brazil

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> Enhanced observability of back-end services by integrating **Prometheus** metrics and visualizing the data through **Grafana** dashboards.

> Assisted in developing self-discovering services by utilizing **etcd**, **consistent hashing** and a federation of Prometheus.

Security Software Researcher   LADES/UnB

📅 Nov 2015 – Jan 2017   📍 Brasilia, DF - Brazil

Enhanced an Intrusion Detection System with unsupervised machine learning to be used by the Brazilian Army.

> Configured a **Debian** server to capture all network packets in promiscuous mode using **Wireshark** and replay them in a controlled environment.

> Successfully detected masked malicious network packets using **K-Means clustering** algorithm and distributed processing with **Spark** and **Hadoop**.

Software Engineer Intern   CanAssist

📅 Jan 2015 – Apr 2015   📍 Victoria, BC - Canada

Developed an elderly care embedded system which notifies relatives in case of emergency.

> Accomplished a low resource consumption of **Raspberry Pi** by rotating log using the **C/C++** language and the **Qt** Framework.

> Created an entire configuration menu using the **Asterisk** framework with Text to Speech capabilities to be used via a phone call to the Raspberry Pi.

EDUCATION

Machine Learning DevOps Engineer

Udacity

📅 Nov 2021 – Dez 2022   📍 Online

BEng. Software Engineering

Universidade de Brasilia

📅 Mar 2011 – Jul 2017   📍 Brasilia, DF - Brazil

University of Victoria

📅 Jan 2014 – Apr 2015   📍 Victoria, BC - Canada

⇄ Exchange Student

LANGUAGES

💬 Portuguese   Mother Tongue
💬 English   Fluent

</> Python   Working Knowledge
</> C/C++   Working Knowledge
</> Rust   Basic Knowledge
</> Elixir   Basic Knowledge

DISTINCTIONS

> Striving for process efficiency and automation through **bash script** and **CI/CD**

> Thoroughly **eliciting requirements** in order to design more efficient solutions

> Demonstrated proficiency in rapid project development by participating in Hackathons and Game Jams.

PUBLICATION

Big Points: An analysis based on game theory
UnB/FGA   github.com/mfurquimdev/tcc

📅 Jul 2017   📍 Brasilia, DF - Brazil

Discovered an imbalance in the Big Points game using the Minimax theorem and **Dynamic Programming** techniques in **C/C++**.

🐧 Linux   >_ Bash   .* Regex   ⌥ GitFlow   ⚙ CI/CD   🐳 Docker   RESTful   SQL/NoSQL   Made with LaTeX