

# MATEUS M. FURQUIM MENDONCA

Machine Learning Engineer & Backend Developer

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## EXPERIENCE

### Machine Learning Engineer DevGrid

Jan 2021 – Present Remote

Design, implementation and maintainance of more than twenty micro-services to estimate the energy consumption of each house appliance using machine learning algorithms developed by the research team.

### Embedded Software Developer Autotrac

Nov 2019 – Aug 2020 Brasilia, DF - Brazil

Development, documentation and metrics performance gathering of security and logistic features for customized embedded system.

### DevOps Consultant IBM

Jan 2019 – Nov 2019 Brasilia, DF - Brazil

Backend instrumentation for throughput, latency, and error rate.  
Automation of service discovery for 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 during the 2016 Olympics.  
Accomplished a low resource consumption of Raspberry Pi by rotating log using C language and Qt Framework.  
Created an entire configuration menu using the Asterisk framework with Text to Speech capabilities via a phone call to the RPi.

### 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 C language and Qt Framework.  
Created an entire configuration menu using the Asterisk framework with Text to Speech capabilities via a phone call to the RPi.  
**Achievement:** Finished the project two weeks earlier than estimate.

## 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 – Abr 2015 Victoria, BC - Canada  
Exchange Student

## 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++

## LANGUAGES

Portuguese Mother Tongue  
English Fluent  
Python Advanced  
C/C++ Intermediate  
GoLang Basic  
Rust Learning

## DISTINCTIONS

- Fast-paced project development in Hackathon and Game Jam
- Process efficiency and automation using bash script and CI/CD
- High comprehension of requirements for modular and robust solutions

Design Patterns SOLID Principles Scrum  
MVC Pattern Git Vim Arch Linux