MATHEUS GOMES

Manchester ◇ United Kingdom
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SKILLS

Programming Languages	Python, C++, Go, Rust, Javascript
Technologies	CMake, Conan, AWS, Azure, GCP, OpenGL, OpenCV
Languages	Bilingual English/Portuguese, Basic Spanish
Interests	Machine Learning, Image/Signal Processing, Computer Graphics Linear Algebra, Mathematics, Content Creation

EXPERIENCE

Roku 2026 - Current
Senior Software Engineer - UI & firmware *Manchester, UK*

- Designing and deploying critical software for a platform with over 100M users worldwide.
- Implementing features for the Roku platform in Brightscript & Typescript.
- Improving embedded firmware platform in C++ & Bazel.
- Woring with the industry's top designers to develop new premium streaming products.
- Using AI agents and first-class citizens to aid in feature developmen.
- Experimenting with the latest models to resolve internal complex problems.

Hadean 2023 - 2026
Senior/Lead Software Engineer - Scalable Systems Engineer *London, UK*

- Architecting and maintaining scalability software for large-scale simulations with thousands of entities replicated across thousands of clients.
- Developing in Rust as a first class citizen language.
- High exposure to AWS, Azure, and GCP infrastructure.
- Implementing cost-saving and efficient pipeline automation techniques.
- Managing build systems and packaging with CMake and Conan.
- Tech lead of interoperability team, developing support for industry protocols.
- Occasional frontend and backend work with Javascript / NodeJS.

Microsoft 2021 - 2023
Senior Software Engineer (Contract) - Applied Sciences Team *Reading, UK*

- Maintained and improved the public API of a deep learning library.
- Developed portable code for different Windows devices (x64 and ARM64).
- Worked with MSVC Toolset and CMake build systems.
- Integrated Machine Learning APIs including SNPE, OpenVINO, and ONNX Runtime.
- Automation in PowerShell and Bash.
- Utilized Azure Pipelines for CI/CD.
- Used Swig for porting C++ APIs to different languages.

Jaguar Land Rover 2020 - 2022
Embedded Software Engineer *Manchester, UK*

- Developed services running on Snapdragon processors for automotive systems.

- Applied modern C++ practices following core guidelines.
- Utilized Modern CMake for build system generation and cross compilation.
- Managed C/C++ packages with Conan.
- Implemented platform agnostic CI/CD solutions.
- Enhanced knowledge in software design and architecture.

AVEVA 2018 - 2020
Software Engineer - C++ and OpenGL Engineer *Manchester, UK*

- Maintained point cloud solution for engineering companies viewing 3D scanned plants.
- Developed new features for desktop application using C++ and OpenGL.

OAK Research 2018
Research Software Engineer *Sheffield, UK*

- Further developed proof of concept from masters project.
- Utilized OpenCV (Python binding), TensorFlow, Numpy, and Pandas.
- Researched alternatives to improve neural network-based classifier.

The University of Sheffield 2016
Research in Speech and Hearing - SURE Programme *Sheffield, UK*

- Gained undergraduate research experience through selective SURE scheme.
- Worked with Professor Philip Green on speech analysis research.
- Analyzed real-time MRI images of the vocal tract.
- Estimated speech parameters including formants, pitch, and vocal tract area.
- Conducted research primarily using Matlab.

Youtube 2010 - Current
Software Engineering Content Creator *Online*

- Created software development content for Youtube and blog.
- Built audience of over 4K subscribers.
- Produced live coding sessions and educational content on software best practices.

EDUCATION

The University of Sheffield *2014 - 2018*
MComp Computer Science with Mathematics - 1st Class Sheffield, UK
Studied linear algebra, group theory, data analysis, and theory of computation. Dissertation involved implementing machine learning techniques with OpenCV, specifically Haar Cascade classifiers. Masters project focused on computer vision and deep learning techniques in medical imaging, developing a workflow for detecting early signs of papilloedema.

Aquinas College - A Levels *2012 - 2014*
A* Mathematics, A Further Mathematics, A Computing, A Spanish Stockport, UK

ST Anne's RC School - GCSE *2009 - 2012*
9 GCSEs ranging from A*-C Stockport, UK

HOBBIES AND INTERESTS

Aside from getting involved in different coding projects during my free time, my passion for cooking allows me to help manage a family catering business. I also occasionally attempt to produce music.