

MARIAN HORGAN

SOFTWARE ENGINEER

CONTACT DETAILS

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SKILLS

Programming Languages:

Python,
Intel Microcode,
C,
Java

Tools and Frameworks:

Git,
Jenkins,
VSCode,
Googletest,
Docker,
Sphinx

Project Management:

Agile / Scrum,
Jira,
Miro

Web Development:

HTML,
CSS,
Flask,
MySQL,
Javascript

Soft Skills:

Leadership,
Communication,
Presentation,
Teamwork

PROFILE

Motivated Software Engineer with 6+ years of industry experience adept in all phases of software development and product life cycle. Hands-on experience in developing, implementing and executing projects for complex encryption systems in a \$60+ billion annual revenue multinational. Strong skills include low level code design, debugging, documentation and code reviews.

PROFESSIONAL EXPERIENCE

Firmware Development Engineer, Intel Ireland

Sep 2018 - Present

- Worked as part of the firmware team on QuickAssist Technology (QAT) for acceleration of security and compression.
- Led the security service team through multiple releases and exceeded pass rate criteria on all milestones.
- Engaged with customers, working closely with them to understand the requirements. Delivered a high quality product ahead of time that was part of the innovation that won the 74th Emmy Tech Award.
- Created low level firmware designs and worked with Architects to close any gaps, whilst adapting to changing requirements.
- Responsible for the planning and estimation of new features, and identified risks in the plan while also providing mitigation strategies.
- Developed many features in firmware with fixed deadlines, using Intel's proprietary language in a test driven development approach.
- Created test plans and ran validation test suites. Debugged issues with the integration team and implemented timely fixes.
- Proposed innovation ideas and developed proof of concepts
- Collaborated across teams and geos for firmware tasks, feature integration and innovation work.
- Interviewed incoming applicants for firmware engineering roles.
- Mentored new hires and interns within Intel Corporation.

Software Engineering Intern, Intel Shannon

Mar 2017 - Aug 2017

- Learned how to develop firmware as part of the QAT team.
- Created bash scripts to automate the C++ simulation tests.
- Updated the API format to adhere to Linux Kernel conventions.
- Adapted the test framework for JSON file input to improve efficiency.

Software Engineering Intern, Intel Shannon

Jun 2016 - Aug 2016

- Worked as part of the project management team focusing on IoT.
- Created a dashboard generator using python scripts to transform excel spreadsheets into presentable slides
- Shadowed an engineer in IoT automotive development.

ACHIEVEMENTS

Two Patent Filings, 2023

74th Emmy Award in
Technology & Engineering
(Intel, Harmonic & Comcast)

WE Innovate 2022
Entrepreneur Programme at
Imperial College London

Intel Shannon Women In
Technology Scholarship 2014 -
2018

Intel STEM Challenge
Winning team 2017 & 2015

OTHER INTERESTS

Volunteering / Coaching

Mentored intern teams in the
yearly Intel STEM Challenge,
2019 - 2020.

Presented at local secondary
schools on careers in software
engineering, 2019.

Visited several primary
schools to judge projects in
the Mini Scientist
Competition, 2018.

Demonstrated Python to UCC
first year CS students for two
semesters, 2015 - 2016.

Cake Decorating -

Completed a 10 week
programme in Cake
Decorating and Fondant
Modelling at LCFE 2019.

Reading - Avid reader and
member of Intel Ireland Book
Club. Have reviewed books for
authors and book publicity
companies.

Yoga - Completed a 10 week
programme in yoga at LCFE
in 2023.

Software Engineering Intern, Intel Shannon

Jun 2015 - Aug 2015

- Installed linux and set up boards in the lab.
- Created virtual machines and containers.
- Tested dynamic resourcing of containers for scalability.

EDUCATION

BSc in Computer Science with Web Systems Engineering,

University College Cork

Sep 2014 - May 2018

- Achieved 2H1 Second Class Honours.
- Subjects studied include Algorithms and Data Structures, Artificial Intelligence, Network Security and Web Development.
- Final year project on evolving interesting patterns in Conway's Game of Life using a genetic algorithm with Python.

PROJECTS

Concussion Headband Wearable — Tech Lead

Jun 2021 - Jun 2022

Joined the winning team from a hackathon, in collaboration with Love of the Game, on developing a desirable wearable that tracks head impact to empower athletes as they perform. My responsibilities included developing a proof of concept and creating a website. I collaborated with team members on the business, user experience and impact of the product as we aimed to turn our idea into reality. I presented our project at a demo event in London, December 2021.

Raspberry Pi Plant Monitoring — Personal Hobby Project

May 2021 - Jul 2021

Took part in the Grow Lab Challenge 2021 by using a raspberry pi and sensors such as a BME280, soil moisture sensor and camera module to monitor seedlings. I shared my progress with the community and presented my plant monitoring project at the Short Stack Conference 2021.

CERTIFICATIONS

OpenEDG Python Institute: Programming with Python Professional Certificate

Feb 2024

Udemy Practical Leadership Skills

Dec 2023

Intel Cloud Fundamentals

May 2023

Imperial College WE Innovate Entrepreneurship Programme

Jan 2022 - Mar 2022

MIDAS Communicating Effectively Training

Jun 2021