John Savill

Project Software Engineer with expertise in software design, development, testing, and cybersecurity

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EXPERIENCE

IDIADA UK, Cambridge — *Software Engineer*

January 2022 - PRESENT

Out of University I was hired to the electronics division of IDIADA UK, a subsidiary of AAPLUS IDIADA based in Cambridge. I have worked for 3.5 years on customer facing projects, producing automotive software solutions and complex functionality in vehicle ECUs as well as R&D projects based around autonomous driving, software-defined-vehicles and IOT cybersecurity.

BoatMac, Norwich — *Technical Assistant*

(Part time) 2016 - 2018

I worked over a couple of summers to develop an innovative way to quickly scan boats (with off-the-shelf hardware), develop a 3D model, design a tailored cover, render the flat net of the cover for cutting, and then manufacture the final fabric cover from the model.

EDUCATION

Loughborough University, Loughborough — *Electrical and Computer Systems Engineering, BEng*

October 2015 - July 2021

I studied at Loughborough University, at the Wolfson school of Engineering, achieving a degree in ECS, working with engineers and working independently, learning topics from embedded C, to game theory, and writing my final year project on using machine learning to identify and sort radio signals.

Norwich School, Norwich

July 2015

Academic scholarship. Finished with A-levels is Maths, Physics, and 3-D technical design.

PROJECTS

ERATOSTHENES — *https://eratosthenes-project.eu/*

A very successful Horizon 2020 research project that I worked on, over 3 years, implementing a cyber-secure trust network to verify IOT devices. I helped design an automotive scenario, integrate the software modules, and validate the network in the active V2X scenario against cyber-attacks. Presented to, and wrote technical deliverables for, the European Commission.

AutoCHERI — *https://autocheri.tech/*

A hardware project, based on using the CHERI secure instruction set on ARM manufactured boards. I helped validate the hardware in an automotive/ V2X scenario with cybersecurity tests enacted in real-world scenarios. I created attacks and implemented cloud communication for the dev boards.

Customer-focussed internal project

A project that involved working with a small, international team to gradually implement low-level functionality to ECU(s) based on customer requirements. Involved writing embedded C to add engine control and safety functionality, testing on-bench, then releasing peer-reviewed code to the customer for implementation. I have dealt with hardware-to-software integration and specific ISO compliance.

TECHNICAL SKILLS

Embedded C, C, C++

GITLAB CI/CD

LINUX

Docker, Docker-Compose

Python

PlantUML diagramming

AGILE project methodology

Project task management with JIRA/ Atlassian

Version control with GIT and Subversion

3D modelling and design

Complex Excel functions

SOFT SKILLS

Teamwork in smaller 2-3 person teams and larger consortiums

Management of personal time and of a small team

Requirement derivation and KPI definition

Customer Relations and communication

Unit Testing of produced code, debugging and HIL

Adaptability to work on multiple projects, of differing scopes, at the same time

Peer Reviewing documents and code with constructive feedback

Presentations/ presenting