

# Jake Bailey-Saltmarsh

[J.Bailey-Saltmarsh@outlook.com](mailto:J.Bailey-Saltmarsh@outlook.com)

+447463 879494

[www.jakebs.xyz](http://www.jakebs.xyz)

Three Keys Cottage  
Quarry Bank, Utkinton  
CW6 0LA, Cheshire

## PERSONAL PROFILE STATEMENT

I am a determined, motivated, and confident university student who enjoys discovering new use cases for technology all around us, from the most mundane repetitive tasks to those requiring surgical precision. My two greatest achievements are reverse engineering a 20k LOC binary in French and creating an online service to deliver Covid-19 patients faster access to test kits. I'll happily work individually but I work effectively in a team. I have always been relied upon and take great responsibility for any work I am a part of.

## WORK EXPERIENCE

### Software Developer, InVentry

(June 2022 – November 2022)

Individually responsible for Door Access Control Integration, a feature with over 1000 customers

Responsibilities included:

- Refactoring legacy code from VB.Net to C#
- Designing interface architecture for upgradability
- Complex use case analysis and solution design
- Instrumental in reverse engineering external APIs and binaries to integrate with our product
- Working in an Agile environment

### Tutor, Tutorfair

(March 2020 – May 2022)

Working individually with students of all abilities to help them learn how to overcome their weaknesses

Responsibilities included:

- Teaching A Level Maths and Computer Science
- Creating and improving lesson plans
- Building rapport with students in one-on-one sessions

### Full Stack Developer, Medical Practice

(April 2020 – June 2020)

Creating a web service to allow eligible Covid-19 patients access to local test kits rapidly

Responsibilities included:

- Building frontend survey style website with EJS templating and handwritten CSS
- Building backend service with API and mongoDB integration
- Administration of Google Cloud Platform services to host web services and DNS management

### System Engineer, Crocky Trail Theme Park

(August 2019 – November 2019)

Four months developing custom embedded AI solution for local theme park

Responsibilities included:

- Architecting a compact and compatible solution
- Use of embedded platform Jetson NANO
- Designing, creating, and training object classifier
- Maximising compatibility of solution with existing hardware via standardised GPIO signals
- Writing software with OpenCV in Python 3

### System Engineer, AJSDyno Performance Diagnostics

(August 2017 – August 2018)

A year of ongoing development for custom embedded solution

Responsibilities included:

- Systems analysis of required features
- Distinct focus on low latency and performance optimisations in an embedded environment
- Creating a bespoke UI library from scratch in C++
- Designing and manufacturing a PCB for an Arduino and additional sensory components

### IT Support Technician, Shell HP Partnership

(June 2017)

Two Weeks in IT department at Shell Northwest Headquarters

Responsibilities included:

- Dismantling and fixing hardware
- Supporting whole site via support tickets
- Carrying out software (Office 365) fixes

## EDUCATION

### **University of Leeds (September 2020 – Present):**

**Degree:** Computer Science BSc (Year 1 – 1<sup>st</sup> Class, Year 2 – 1<sup>st</sup> Class, Year 3 - 1:1 (prediction))

### **Sir John Deanes Sixth Form College (September 2018 – June 2020):**

**A Levels:** Computer Science (A\*), Mathematics (A\*), Further Mathematics (A)

**AS Levels:** Further Mathematics (A)

**Awards:** Academic Excellence in Computer Science

### **Tarporley High School (September 2013 – June 2018):**

**GCSEs:** Biology (9), Chemistry (7), Computer Science (8), Electronics (A\*), English Literature & Language (8, 7), Geography (7), Mathematics (9), Physics (9)

**Qualifications:** ECDL (Distinction\*) and CiDA (A\*)

**Academic Achievement Awards:** Computer Science, I.T., Maths, Physics

## HOBBIES AND INTERESTS

I am passionate about creating software, in my spare time I have created self-driving robots, LCD control modules and web enabled weather station which all run using the Arduino platform. I have created two games with Unity and released an early alpha version on itch.io. I have taught myself how to program in C++, C#, Python, JavaScript, VB.Net and HTML. Through this, I became more organized, independent, and autonomous.

Since age 11, I have been karting at a national level. I started in 7hp karts in NatSKA, eventually working my way up to 29hp karts at age 15. At age 17, I won the National Sprint Finals in Rotax Max Jnr. Upon joining university, I have continued to race in BUKC and have been selected to represent Team A for the University of Leeds. This has taught me the significance of being competitive, determined, perceptive and responsible.

I have completed the Bronze, Silver and Gold Duke of Edinburgh. Once by walking and twice by canoeing. These were eye opening experiences that educated me on how to deal with a multitude of difficult and challenging situations. Throughout these experiences, I learnt the importance of resilience, determination, teamwork, and a strong work ethic.

Since the age of 6 I have been a member of the Scout Association. To continue to support my troop in the Cub Scouts section, I chose to complete the Young Leader Qualification. I have also achieved the most respected award at each level of scouting, both locally and nationally.

## REFERENCES

Lead Developer, InVentry – Matthew Petch: [matthew.petch@inventry.co.uk](mailto:matthew.petch@inventry.co.uk)

Senior UI/UX Designer, Code Computerlove – Louis Collins: <https://www.linkedin.com/in/louis-collins-16ba44141>

Personal Reviews, Tutorfair – Website: <https://www.tutorfair.com/JakeBS27>