

Ben Carpenter

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Personal statement

Final year Computer Science undergraduate with over 15 months of industrial experience in aerospace and MedTech software engineering. Proficient in C++, Python, and QT, with previous experience in delivering radar prototypes and automated testing solutions within Agile environments. Experienced with utilities such as Jenkins, Version Control (Git) and Visual Studio IDE. Seeking a challenging role to apply strong technical skills in full-lifecycle software development within a professional environment.

Work Experience

Industrial Placement Software Engineer, Leonardo

Newcastle *(July 2024 – July 2025)*

Leonardo focuses on the technologies in aerospace, defence and security. I worked at the Newcastle site and was focused on radar software development.

Responsibilities:

- Facilitated Agile processes as Scrum Master; led daily stand-ups, retrospectives, and presented weekly demos to project stakeholders, ensuring clear communication between technical teams and management.
- Developed functional radar prototypes using C++ and the QT framework, successfully implementing complex vector maps and map projections to enhance visual capabilities.
- Aided in overall radar software development, worked on UML designs, code implementation and automated Behaviour Driven Development testing.

Junior Software and Support Engineer, Cognidox

Cambridge *(June 2023 – September 2023)*

Cognidox is a software company who develop and offers a cloud-based Document Management System for medical devices and high-tech product development.

Responsibilities:

- Developed and ran Selenium test scripts and Nagios server scripts, written in Python.
- Designed and deployed a visual customer support dashboard using HTML, CSS, and JavaScript. The tool presented correlations between ticket issues and industry types, enabling the support team to identify trends faster.
- Researched and documented potential AI tools to aid customer On-Boarding and support.

Achievements:

- Reduced manual testing time by implementing Python/Selenium scripts that validated system tasks. I aided with the completion of 100 automated tests, ensuring 100% test coverage prior to release.
- Evaluated and presented AI tools that could benefit customer support. My assessment focused on LLMs to support chatbots and tools which can aid in knowledge base creation.

Technical Skills

- **Languages:** C++, Python, Java, JavaScript, Haskell
- **Frameworks:** QT, Selenium
- **Developer Tools:** Git, Docker, Jenkins, Visual Studio IDE, Cmake
- **Methodologies:** Agile (Scrum), Behaviour Driven Development, UML, SDLC

Education and Qualifications

Nottingham Trent University – BSc (Hons) Computer Science with Year in Industry (2022 – 2026)

Third Year – On track towards a First Class

Final Year Project – C++/Qt Currently working on a map projection visualiser.	Artificial Intelligence - Python Developing an AI chatbot and expanding its functionalities.
Advanced Software Engineering - C++/Haskell Understanding programming theory and software-development practices.	Service-Centric and Cloud Computing - Java Developing a program which utilises Web/Restful services and message queues in a real-life distributed computing problem.
Advanced Analysis and Design – C++/Qt Developing a Smart Fridge program in a group, working under the Agile Methodology.	

Placement Year - Placement Diploma in Professional Practice – First Class

Second Year – Upper Second Class

Software Engineering – C++ Manipulating and developing programs in Ubuntu.	Information & Database Engineering - SQL Learnt and manipulated SQL databases using Oracle Client.
Software Design & Implementation - C++ Developing and implementing a Weather Data Application.	Systems Software - Java Developed a cloud storage system in a team of two, utilising docker containerised environments.
Foundations of AI & Machine Learning - Python Researching and presenting AI topic and working with datasets in Python.	Project Management & Professional Development Learning how to apply technical skills in a professional manner.

First Year – Upper Second Class

Ipswich School (2015 – 2022)

A-levels in Computer Science, Design Technology and Mathematics

Hobbies & Interests

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- Enjoy doing park run and going hiking.
 - Active member of the Scuba Diving Society, currently working towards PADI Ocean Diver qualification.

References

Tom Taylor | **Leonardo** – Senior Software Engineer | tom.taylor@leonardocompany.com

Joe Byrne | **Cognidox** – CEO | joe.byrne@cognidox.com