

# Charles Cochran

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## Profile

A passionate and creative software engineer with experience in corporate, academic and military settings. Seeking challenging technical roles to learn new and hone current skills, work with interesting and experienced professionals and deliver quality, well designed work. A lover of learning with a strong team ethic.

## Employment History

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### IBM Corporation: Software Engineer

**2014 - Present**

I work on Bluemix, IBM's cloud based PaaS and WebSphere Liberty profile, a lightweight Java application server. I have good development experience with cloud infrastructure and with application servers and containers.

### IBM Corporation: Technical Consultant

**2013 - 2014**

I worked as a data specialist and have grown a strong set of technical and consulting skills, working with many different project teams and clients such as Vodafone and Nationwide to provide masked and live data solutions.

### Intel Corporation: Customer Quality and Reliability Engineer

**2011-2012**

13 month placement with a breadth of projects, working with customers on hardware, software and manufacturing quality. I gained priceless early experience and self-confidence in large teams and with clients.

### 131 Commando Royal Engineers: Sapper

**2009-2011**

Trained Soldier and B3 Combat Engineer

## Qualifications

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### Plymouth University: BEng Robotics

**2009-2013**

Received a 2:1 with honours. Included modules of programming, hardware design, electronics and robotics

### Bridgwater College: A/AS levels

**2007-2009**

3 A levels: Maths, Biology and Physics. 1 A/S level: Computing

### Haygrove School: GCSEs

**2002-2007**

14 GCSEs; 10 A's, 2 B's and 2 C's including Maths, French, German, electronics, physics and ICT.

## Skills and Knowledge

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### Programming Proficiencies

I have a wide knowledge of programming and am happy to demonstrate demos on request. I have produced open and closed source software used by Intel, IBM and their many customers. Most recently I have been working with Cloud Foundry and IBM's Bluemix, a cloud based PaaS. Working with cloud has been a pleasure; I am fascinated by highly distributed software, SOA, Scalability, Orchestration and Containers. My experience includes:

- Software Development: Java, Ruby, Go
- Web Programming: HTML5, CSS3 and a little JavaScript, have produced my own Ruby blog framework.
- Cloud/Distributed: Cloud Foundry core dev, Akka, Docker, Bluemix and Digital Ocean, SOA experience
- Databases: Redis, MongoDB, CouchDB, MySQL, InfluxDB
- Tools: Windows and Linux (at home in CMD line or GUI), Git and RTC, Jenkins
- Previous experience: C, C++, VHDL, VB, Matlab

I run a Ruby reading and teaching group and am part of the local Software Craftsmanship community, who host regular talks and code retreats. I love video games and interactive storytelling and develop games in my free time using the Oculus Rift Virtual reality headset. I also have made a set of web API service applications using Go, Redis and MongoDB and recently started a Go reading group also.

### Hardware Knowledge

During my studies and free time I've produced multiple embedded and robotics devices. Intel also gave me extensive training and experience on the Silicon manufacture processes and on computer architecture.

- Hardware design, PCB manufacture and FPGA programming with VHDL.
- Silicon manufacturing process and reliability studies on electronic hardware and Silicon chips.
- Health and safety considerations and risk management in a lab environment.

### Passion for Robotics

From a young age, Robotics has been a fascination of mine. I've produced many projects with a variety of focuses, some of my main interests being: biologically inspired design, evolutionary computation, machine vision, aerial robotics, resource gathering, automated manufacture and autonomous and multi-agent control. Robotics offers me the opportunity to do great work, blending my hardware and software knowledge. Some project examples:

- ALBot: a machine vision toy able to follow objects and produce music based on its surroundings.
- Cayley 1: a low cost quad rotor helicopter built from scratch with my own flight control software.
- Robomato: a self regulated tomato growing environment for crop production in extreme environments.

### Professionalism and experience

Working at Intel and IBM has taught me a lot about professional standards and teamwork. Also, my time in the military added to my hard working ethic, performance under stress and time management skills.

- Used to working as part of a team in corporate, high pressure environments. Have worked in global teams and enjoy learning from different cultures and countries. Have lead small projects and understand the importance of delegation and team dynamics.
- Great presentation and people skills. I have presented around the country and have given many technical presentations; for example presenting a talk at Stephen Hawking's 70th birthday symposium on modern silicon manufacture. I've had lots of client bid and technical presentation experience and love doing it.
- Time and project management: setting project milestones, punctuality and meticulous planning have helped me achieve a high working standard. Was responsible for multiple high level projects at Intel and IBM, all of which were delivered to high standards on time, examples of which can be demonstrated on request.

### Other qualifications and awards

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#### Plymouth University Radio: Radio Host

2012

Hosted the "Rock Show" and co-host a current affairs talk show "News'd and Abused".

#### Haygrove School: Electronics Award

2006 -2007

I was given the responsibility of being a prefect and updating the student run school website. I received the best student award for electronics for overall effort, quality of work and top grade.

#### Duke of Edinburgh award: Bronze and Silver

2006 - 2009

### Interests

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- Travel: I love backpacking, meeting new people and immersing myself in different cultures.
- Fitness: avid road cyclist, gym frequenter and amateur boxer.
- Love of horticulture: automation of tomato production and harvesting is a longstanding side project.

### References

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Available on request