

# Samuel Chorvat

Software Engineer  
Worcester, United Kingdom

Email: samchorvat@gmail.com  
Mobile: +44 (0)7922096648  
linkedin.com/in/samuel-chorvat-3b67b7172

## EDUCATION

- **MSci Computer Science; First Class Honours** 2017 - 2021  
*University of Birmingham* *Birmingham, United Kingdom*

## SKILLS SUMMARY

- **Languages:** C#, Java, SQL, SPARQL/RDF/OWL, JavaScript, Python, C/C++
- **Tools:** GIT, Azure Data Factory, Azure Pipelines, GitHub Actions, Docker, Kubernetes
- **Cloud:** Microsoft Azure (AZ-900 and AZ-204 certifications), DigitalOcean

## WORK EXPERIENCE

- **Kainos** Birmingham  
*Software Engineer (Full-time)* *July 2021 - Present*
  - Defra - Department for Environment Food and Rural Affairs (March 2023 - Present)**
    - \* Proof of Concept project using Semantic Web and Azure
  - NHS App England (September 2021 – January 2023)**
    - \* Full stack (including Analytics) developer
    - \* Worked on web front-end (JavaScript - Vue.js), back-end (.NET - C), native app (Xamarin) and Analytics (ETLs, PostgreSQL, Azure Functions, AzureData Factory ...)
    - \* Also part of a team responsible for releasing weekly configuration patches to production
    - \* Presented at team and project wide knowledge share meetings
  - Completed Engineering Academy (July 2021 – September 2021)**
- **University of Birmingham** Birmingham  
*Teaching Associate for Software Workshop Module (Part-time)* *Sep 2019 - Mar 20*
  - Helping students with lab exercises during lab sessions and with assignments during help desk sessions.
  - Working in a team of lecturers and teaching associates.

## PERSONAL PROJECTS

<https://samuelchorvat.github.io/#personal-projects>

- **Ashcrown** 2019 - 2023  
*Cross-platform online strategy game for PC/Android/iOS*
  - **Game Client:** Unity (C#)
  - **Game Server:** Java (SmartFoxServer Framework)
  - **Database:** SQL(MySQL)
  - **CI/CD Pipelines:** GitHub Actions - Pipelines for automatic build/test/deployment of the front-end to App Store/Google Play/Steam and back-end to DigitalOcean
  - **Other:** Multiple environments(localhost, Dev/Staging and Production). Certificates managed using let's encrypt. Separate virtual private networks/clouds and firewall whitelisting to secure them. In-app purchases are implemented for all platforms including server side receipt/purchase validation. "AI" implemented using adapted min-max algorithm.
- **Man In The Middle** 2019 - 2020  
*Cross-platform educational puzzle game about breaking cryptography and cryptographic protocols*
  - **Game Client:** Unity (C#)
  - **Other:** The game is split into two main sections.
    - \* Introduction to Cryptography - Introduces player to world of cryptography in form of puzzles. From simple caesar cipher to block ciphers and AES
    - \* Protocol Attacks - Goes over cryptographic protocols that increase in complexity as player progresses through the game and asks them to spot and exploit weaknesses in them