

Danny John Piper

I am a software engineer looking to do more software engineering.

Contact Me

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My Socials • Website: <https://djpiper28.co.uk> • Github Profile: [djpiper28](#) • Devpost Profile: [djpiper28](#)

Education

university Diploma of Higher Education in Computer Science

A-Levels A-Levels in Mathematics, Chemistry, Computer Science, Further Mathematics (A*AAB) from Peter Symonds Sixth Form.

GCSEs Ten GCSEs including an 8 in Chemistry and, Maths and; an A in Further Maths.

Experience

Academy Software Engineer at BJSS

- Worked on a new webapp for the CAA to allow for authorisation applications
- Used NextJS (With TS) for the frontend and C# for the backend
- Used Kubernetes and Docker on Azure for deployment

Monarch Development Volunteer Software Developer (2020 - 2023)

- Writing open source tournament software for Magic the Gathering
- Self-hosting a Discord bot and, game bot
- Technologies: Qt, C++, C, Cmake, Protobuf, Python, Rust, Github
- Open Source: <https://github.com/MonarchDevelopment/>

Computing Society Committee Member (2021 - 2023)

- Software development for numerous automation tasks
- Running the society and, helping to organise events
- Ran two large hackathons whilst volunteering

Royal Hackaway v5-7 (2022, 2023, 2024) Event Organiser / Volunteer

- Computing Society's Annual Hackathon
- Helped to organise v5, which had 76 In person attendees
- Helped to organise v6, which had 121 In person attendees, 46 online attendees
- Volunteered at v7 as a photographer

Arcio Co-founder (2022)

- Attendance and, timetabling system
- Microservices architecture
- Technologies: Go, Postgres, Nginx, REST, Github, Docker

IBM Work Experience During Secondary School (2017)

- Shadowed a software tester
- Testing ZOS, using regex and, Java

Retail Various Companies (2018 - 2021, Nov 2022 - Jun 2023)

Personal Projects

A representative portfolio of personal software development can be found on my [Github profile](#), indicative projects of my software development work and, respective capabilities are the ones below.

MTG Search Engine (Search Magic cards with a declarative language)

- Parser and interpreter
- Cards are indexed with AVL trees and, Trie trees
- Multithreaded with a userland thread pool

Squire Desktop (A project with Monarch Development)

- Cross platform GUI tournament management software for Magic the Gathering
- Technologies: Qt, C++, C, Rust, Cmake, Python, cross-language linking

Cockatrice Tournament Bot (A project with Monarch Development)

- A bot to host tournaments for an online card game emulator and, save replays
- HTTP API server to allow the Discord bot to control the games
- Technologies: C, C++, Cmake, Python, Protobuf, Websockets, HTTP Server
- Live at: <https://tricebot.co.uk>

Advent of Code Leaderboard Bot

- A Discord bot to scrape Advent of Code scores and, provide a leaderboard
- Technologies: Go, Postgres, Webscraping

Linux Server Administration and, Self Hosting

- Networking - proxies, firewalls, routers and, switches
- Software setup and, maintenance
- Technologies: SSH, (Arch) Linux, Nginx, Jenkins, Postgres, Various Self Hosted Projects