

Danny John Piper

Contact Details

• Email Address: djpiper28@gmail.com • Phone Number: +44 75 41 49 26 43 • Linkedin: <https://www.linkedin.com/in/djpiper28> • Website: <https://djpiper28.co.uk> • Github Profile: [djpiper28](#) • Devpost Profile: [djpiper28](#)

Education

Current Interrupting my studies of Bsc Computer Science at Royal Holloway, University of London during my third year. This means I am now available to work.

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

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

Experience

Monarch Development Volunteer Software Developer (2020 - present)

- 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/>

Arcio Co-founder (2022)

- Attendance and, timetabling system
- Microservices architecture
- Technologies: Go, Postgres, Nginx, REST, Github, Docker
- Open Source: <https://github.com/arcio-uk/>

Computing Society Committee Member (2021 - present)

- Software development for numerous automation tasks
- Running the society and, helping to organise events
- Ran two large hackathons in my time here

Royal Hackaway v6 (2023) Event Organiser (Stream Team)

- Computing Society's Annual Hackathon
- 121 In person attendees, 46 online attendees
- Live streamed and, recorded; footage edited to improve audio and posted on our [Youtube channel](#)

Royal Hackaway v5 (2022) Event Organiser

- Computing Society's Annual Hackathon
- 76 In person attendees
- Wrote a TiTo frontend in C++ for the event that generated ID cards on the fly

IBM Work Experience During Secondary School (2017)

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

Tesco Store Colleague (2022 - present)

- Developed my communication skills by working with customers on the checkouts

McDonalds Crew Member (2018 - 2021)

- Developed my teamwork and, communication skills by working in a fast paced environment

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.

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
- Open Source: <https://github.com/MonarchDevelopment/SquireDesktop>

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
- Open Source: <https://github.com/djpiper28/CockatriceTournamentBot>
- 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
- Open Source: <https://github.com/djpiper28/advent-of-code-discord-bot>

Year 2 Team Project

- An online restaurant ordering system done at university as part of a team as a coursework - using TDD and, the agile method
- Technologies: Postgres, Java, Go, C++, Qt
- C++ Qt5 Admin Console; Go real time order update system for staff screens; Java backend that uses Getty
- Source Available (Git history cleared): <https://github.com/djpiper28/yaer2-team-project>
- Live at: <https://rhul-hack.com>

benchmarking.h

- C library for benchmarking functions
- Designed for benchmarking libraries and, their CPU time, memory usage and, over a range of parameters
- Open Source: <https://github.com/djpiper28/benchmarking.h>

Tito Client For Royal Hackaway v5

- A C++ terminal themed client for the Tito Checkin system
- Generated ID cards for attendees with a QR code and, their name; then sent it to the printer
- Everything but the printer worked on the event
- Open Source: <https://github.com/rhul-compsoc/tito-integration-hackaway>

Cursed Snake

- Hackathon project - a game of snake that was as silly as possible
- Gryoscope controller - an Android app that talks to the snake server and, lets you rotate your phone to play
- Snake server - a matplotlib heatmap of snake that uses a webserver to receive input
- More Information, Including Source Code: <https://devpost.com/software/cursed-snake>

Linux Server Administration and, Self Hosting

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

Programming Languages and, Technologies

Languages • C • C++ • Python • SQL • Go • Rust • Java

Technologies - CI/CD • Jenkins • Github Actions • Docker

Technologies - Database • SQLite • Postgres

Technologies - Web • REST • Websockets • HTTP • Nginx

Technologies - Misc • Linux • Git • Networking