JACOB MACKENZIE-WEBSDALE

Full stack developer

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PROFESSIONAL EXPERIENCE

My personal experience can be found at the end of the document.

Aide Jeune — TypeScript / NodeJS developer — 04.2021 to present

- Aide Jeune is a team of volunteers who want to create an environment that serves as a safe space where young people can speak about their emotions and get help.
- For this project, I develop the tools used to analyse the community and to provide members with automatic advantages for their voice and text activity. All data is automatically saved on Google Sheets, to create graphs that members can see.

Kolumbao — Main Python developer — 06.2018 to present

- Kolumbao is a type of software called a "bot", that connects people from multiple communities with shared spaces to help people find new friends without the need to search and join countless groups.
- I'm the lead developer on the project, and I develop almost all the code in Python - except for a small part that is in Rust.

Gradder — Full Stack developer (internship) — 08.2020 to 09.2020

- Gradder is a website, created by a start-up that won several awards and grants, that is used to help schools assign homework, schedule, and receive students' schoolwork. It is like other known systems, but very modern and made with safe and secure technologies.
- I was a Python developer at the start, but over time I became a full-stack developer, helping to create the website and backend responsiveness with TypeScript and React.

EDUCATION

Class	Qualification	Grade
Year 13 (18-year-old)	OCR Level 3 Advanced GCE in Computer Science	A*
	OCR Level 3 Advanced GCE in Mathematics A	C
	AQA Level 3 Advanced GCE in Physics	C
Year 11 (16-year-old)	AQA Level 1/Level 2 GCSE (9-1) in French	8
	AQA Level 1/Level 2 GCSE (9-1) in History	6
	AQA Level 1/Level 2 GCSE (9-1) in Religious Studies Specification A	6
	AQA Level 1/Level 2 GCSE (9-1) in Spanish	6
	OCR Level 1/Level 2 GCSE (9-1) in Computer Science	8
	OCR Level 3 Free-Standing Mathematics Qualification: Additional Maths	A
	Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Biology	5
	Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Chemistry	6
	Pearson Edexcel Level 1/Level 2 GCSE (9-1) in English Language	8
	Pearson Edexcel Level 1/Level 2 GCSE (9-1) in English Literature	6
	Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Mathematics	8
	Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Physics	7

SKILLS

Very Strong	Strong	Average	Currently learning
• Python • SQLAlchemy • Flask • Aiopika • Discord.py • JavaScript • TypeScript • Discord.js • HTML • CSS	• React • RabbitMQ • SQL • PostgreSQL • MongoDB • Ruby • Rust	• TensorFlow • Keras • C# • Ruby • PHP • GCP	• Kotlin • Java • C • C++

PERSONAL EXPERIENCE

You can find more of my projects on GitHub.

Horai

Horai is a website for writing notes and making schedules, especially for school and university. The website is developed in HTML, CSS and TypeScript, and the server is made in Python with Flask, which manages the database. It is the successor of **Notes**, which used local storage instead of a server.

Piston2d-Python

Piston2d is a library in Rust that allows developers to use simple graphics to make games and applications. I was inspired to create a Python binding for this library, so that I could use the efficiency of Piston2d in Python.

Rust Galaxies

Also developed in Rust, Galaxies is a planet and sun simulator that is fully configurable with a JSON file. You can change the speed of time and zoom in/out.

Py18n

Py18n is a library that helps provide text in other languages, without the need to set up language files. All you need is a YAML file or your own method of getting text. It also includes a Py18n-extension library which makes it easier to use with Discord.

Q-learning

Q-learning is a Python library that uses Keras to create virtual simulations with neural networks that is very easy to configure.

INTERESTS

I love learning things, even outside of my job - and I spend a lot of my free time learning. I especially like astrophysics, and I'm really interested in learning about the new technologies we use and the 'laws' of the universe. I also love learning languages, and I am learning Portuguese, so I can speak it with my partner's family. I have been learning French since I was 7 years old, and I speak it almost fluently.

OTHER INFORMATION

CV in French available, as well as letters of recommendation and references in French or English.