CODIE NEWARK

SOFTWARE DEVELOPER

📞 Please E-Mail for Phone Number

✉ codienewark@outlook.com

📍 Norwich, UK

Computing Sciences graduate with teamwork, interpersonal and personal management skills, and a passion for applying my skills to creative and challenging projects.

Education

2017–21   University of East Anglia

Master of Computing Science

Currently finishing, expecting a Merit

Modules Including:

Machine Learning, Data Mining, Advanced Programming, Software Engineering, Artificial Intelligence, Information Retrieval, Computer Vision, Audio-Visual Processing, Database Systems

Third-Year Research:

Time-Series Classification of EEG and MEG Datasets: An Evaluation of The Performance and Limitations of Different Classifiers

Fourth-Year Research:

Improving diagnosis from multimodal brain data through machine learning

2015–17   Peterborough Regional College

BTEC Level 3 Software Development Extended Diploma

At grade Distinction* Distinction* Distinction* (Equal to A-Level A*A*A*)

Work Experience

2021   Research Associate – University of East Anglia, Norwich

- Created a Web API for predicting Covid-19 presence within an uploaded X-Ray image using a TensorFlow model.
- Integrated the new API into an existing Vue web app.

2019   Associate Tutor – University of East Anglia, Norwich

- Assisting undergrads with web-based programming exercises.

2018-19   Software Engineer - Pickr, Norwich

- Designed, then implemented React based front-end projects for the company's "V2" deployment. Including a React.js web app, a React Native mobile app, and a shared code library.
- Worked with the back-end team to aid in migration from the old PHP based MVP to a new C# implementation.
- Worked with executives to explore and design potential improvements and features.

2017   Software Developer - Mold Agency, Peterborough

- Designed and implemented a new analytics system to monitor product traffic and engagement using JavaScript.

2016   Junior Software Developer - Automatic Data Processing, Peterborough

- Developing new features and otherwise maintaining payroll services.

Projects

Below are two of my more popular projects. There are many more that you can find on my **GitHub** profile.

2015–18   **Halo: Online, Video Game Mod, Group Project**

- Reverse-engineering an unfinished and very broken game using tools such as IDA Pro, then using a C++ and inline x86 Assembly codebase to write patches and new features.
- As a group of 25, we started with a completely unplayable game build, and ended with a fully fledged game and a partnership with Microsoft.
- This project was featured in PC Gamer magazine a few times, and on the front of Twitch.tv.
- Created various tools for working with the game, including a Unity based map editor.

2020–21   **Mine Online, Video Game Mod, Solo Project**

- Reverse-engineering old, now defunct versions of Minecraft to fix bugs that have appeared over time.
- Created a patch system to fix every known issue in every pre-release version of Minecraft.
- Designed tools for other artists and developers within this small (about 10,000) but dedicated community of players.

Experience

5 Years +

C#, Python, C, C++, JavaScript, Java, Git, HTML + CSS, Agile Scrum methodology, MongoDB

3 Years +

React.JS, React Native, TypeScript, PHP, Flask (Python Framework), Express (JavaScript), MySQL, Unity

1 Year +

LUA, Assembly (Intel x86, ARM), Shaders (HLSL), 3D Modelling

Personal Interests

My free time is split between code and art. With code, I really like to challenge myself, I think that's something that shows through my uni projects, machine learning on brain activity. It's also why I learned reverse engineering and worked on Halo: Online. I love to learn. On the art side I've been learning music production and illustration.

References

Professor Richard Harvey, Academic Director of Admissions for UEA

Please E-Mail for contact information.

Jonathan Martin, Senior Software Engineer at Oakbrook Finance (Previously CTO at Pickr)

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