

Oktarian Tilney-Bassett

Website: oktarian.com

GitHub: OktarianTB

LinkedIn: Oktarian-TB

Education

Hong Kong University of Science and Technology

2019 – 2023

- Bachelor of Engineering in **Computer Science** (*Program Ranked #17 Worldwide*) GPA: 3.7/4.3 ~Top 5%
- **Coursework:** Algorithms, OOP, Software Engineering, Databases

French Baccalaureate – Scientific Stream

Score: 18.21/20 (2019)

Skills

Languages: JavaScript, C++, C#, Python

Databases: PostgreSQL, MongoDB

Web Frameworks: ReactJS, NodeJS

Tools: Git, Postman

Experience

Gearset | *CI Deployment Pipelines Team*

June – August 2021

Software Engineering Intern

Full Time / Cambridge, UK

- Implemented features, improvements and bug fixes related to continuous integration deployment pipelines
- Developed high impact features such as a new wizard for creating CI jobs, support for Bitbucket pipelines and webhook deletion, whilst maintaining high standards of code and testing coverage
- Created an internal dashboard to display a range of useful metrics for monitoring pipeline usage
- Collaborated with the team on design discussions and participated in version control activities

University Campus Map | *Full Stack Team*

October 2020 – June 2021

Software Engineering Intern

Part Time / Remote

- Responsible for a group of 3 students working on frontend and backend features and improvements
- Completed a re-design of the mobile website UI and integrated new path finding and localization features
- Worked cross-platforms by implementing deep links on both iOS and Android using React Native and managing redirection on the web application using ReactJS

Projects

Visitado | *GitHub Link* | *JavaScript, NodeJS, ReactJS, MongoDB*

- Created a full-stack travel social network for users to track locations visited, earn badges and share posts
- Implemented a dynamic frontend, a RESTful API backend, authentication and database management

Flight Simulator | *GitHub Link* | *C#, Multi-Threading, Unity Engine*

- Developed a chunk-based procedurally generated 3D world with biomes to be explored by plane
- Leveraged multi-threading and mesh colliders optimizations to enable smooth generation

Raytracer | *GitHub Link* | *C++*

- Created a program to construct ray-traced images of scenes recursively with refraction and reflection
- Implemented advanced algorithms for texture mapping, complex geometry intersection, lighting

Game Jams | *Portfolio Link* | *C#, Unity Engine*

- Created games within a few days for Global Game Jam, GMTK, Ludum Dare and others