Braden Marshall

SOFTWARE ENGINEER · FULL-STACK WEB ENGINEER

☐ (+44) 7469 753230 | ✉ braden1996@hotmail.co.uk | ⌂ bradenmarshall.co.uk | ⬡ Braden1996 | ▯ braden-marshall | ⚲ London

Summary

Full-stack engineer passionate about solving **meaningful problems** with speed by leveraging **open-source** technologies on top of a concrete foundation of **Computer Science** principles, made possible through a **pragmatic** mindset and **Lean** methodology.

Hobbies include: bodybuilding, entrepreneurship, and *NIX customisation.

Experience

Theodo UK — *London, England*
WEB AND MOBILE SOFTWARE ENGINEER — *Aug. 2017–PRESENT*

- Built and launched 10+ web and mobile apps (React, React Native, Redux, Node, AWS) using Agile methods (Lean, Scrum and DevOps), including work on e-commerce platforms, data visualisations, machine learning algorithms and chatbots.
- Lead and completed the first project migration to Typescript at Theodo. This experiment grew our team's velocity from 7.5 to 15 in 4 weeks. Delivered company-wide trainings on Typescript and the migration process that led to Theodo adopting Typescript for all new projects.
- Contributed several features and fixes to our internal project generator, most notable of which was a React app hosted on AWS S3, CloudFront and Certificate Manager (via Terraform).
- Onboarded and trained, in both project tech-stack and methodology, ~10 junior and ~10 experienced developers.

Theodo France — *Paris, France*
WEB AND MOBILE SOFTWARE ENGINEER — *Oct. 2017 - Jan. 2018*

- Travelled and lived in Paris, within one of Theodo's sister startups, and built the *session replay tool* for Content Square, one of the world's fastest growing *digital experience platforms*.

Self-Employed — *Horsham, England*
VIDEO-GAME MOD DEVELOPER — *Sep. 2013 - Jan. 2016*

- Developed *11 "plug-and-play" addons*, for the popular video-game Garry's Mod.
- Marketed and *sold over 1,000 units* to server administrators (exposing my addons to *100,000s of players*).
- Collaborated with clients to design and build *bespoke addons* for their own communities.
- Provided support to many clients, with varying levels of technical expertise.

Cardiff University — *Cardiff, Wales*
CUROP RESEARCH ENGINEER — *Aug. 2015 - Sep. 2016*

- Co-authored a paper on Argumentation Theory (an AI field) as part of Cardiff Undergraduate Research Opportunities Programme (CUROP).
- Paper was accepted for inclusion in the International Conference on Computational Models of Argument (COMMA) 2018.
- For more, see: `http://disco.cs.cf.ac.uk/` and `http://ebooks.iospress.nl/publication/50220`

Education

Cardiff University — *Cardiff, Wales*
B.SC. IN COMPUTER SCIENCE — *Sep. 2014 - Jun. 2017*

- Achieved **First-class** with honours (**~85% marks achieved**).
- Final-year modules include: Artificial Intelligence, Graphics, High-Performance Computing & Multimedia.
- Dissertation: a modern browser-based multiplayer implementation of the arcade game Tron; complete with a sophisticated AI powering "computer" controlled opponents.

The College of Richard Collyer — *Horsham, England*
GCE ADVANCED LEVELS (A-LEVELS) — *Sep. 2012 - Jun. 2014*

- Computing (**A***)
- Information Technology BTEC Level 3 (**Distinction***, **Distinction***)
- Mathematics (**B**)

Honors

2014   **Collyer's Academic Progress**, nominated by Computing teacher for exceptional performance.

Side Projects

Icarus: a tiling windows manager, featuring gaps, created for MacOS. Implemented, following the *object-oriented* paradigm, using a *binary space partitioning tree* plus custom algorithms for efficient querying and layout computations. Can manage other GUIs, e.g. the DOM of a web-page.

TWERK: an administrative addon Garry's Mod, a popular video-game, featuring: a sophisticated GUI; user groups with permissions; powerful user commands; as well as rich plugin and theme systems.

Audio Synthesiser: GUI application built with MATLAB implementing several *audio-signal processing* algorithms (including *spectrogram editing*, *phase vocoder*, *ADSR volume shaping*, *wah-wah*, *flanger* etc). Effect pipeline allows for some powerful creations.

Skills

Programming	JavaScript, TypeScript, Python, Lua, Java, MATLAB, SQL, C++.
Frontend	React, Redux, Styled Components, React Native, D3.js, HTML5 & CSS3.
Backend	Node (w/ Express + Knex, Loopback etc), Django.
DevOps	AWS, Docker, Circle CI, Linux, Firebase.
Other	Git, Test-Driven Development (w/ Jest, Cypress, ESLint etc), Algorithms & Data Structures.