Braden Marshall

SOFTWARE ENGINEER · FULL-STACK WEB AND MOBILE ENGINEER

(+44) 7469 753230 | me@bradenm.co.uk | bradenmarshall.co.uk | Braden1996 | braden-marshall | London

Summary

Software engineer passionate about building **meaningful problems**, with speed, by leveraging **open-source** technologies on top of a concrete foundation of **Computer Science** principles. Proponent of **Lean** methodology and the **pragmatic** attitude it encourages.

Experience

Thought Machine — London, England
SOFTWARE ENGINEER — *Aug. 2017–PRESENT*

- Built and maintained the Operations Dashboard, as part of the workflows team, which produces forms dynamically configured with YAML.
- Led internal migration to Formik (from a custom legacy form solution).
- Responsible for all stages of feature flow from scoping idea to delivery.
- Stack: React, Redux, GraphQL (Apollo), Formik, TypeScript, Go.

Theodo UK — London, England
WEB AND MOBILE SOFTWARE ENGINEER — *Aug. 2017 - Sep. 2019*

- Built and launched 10+ web and mobile apps (React, React Native, Redux, Node, AWS) using Agile methods (Lean, Scrum and DevOps), for billion dollar companies and Series A startups alike, including work on e-commerce platforms, data visualisations, machine learning algorithms and chatbots.
- Led 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 drove the migration process that led to Theodo adopting TypeScript for all new projects.
- Contributed several fixes and features to our internal project generator, most notable of which would spawn a React app hosted on AWS S3 utilising CloudFront and Certificate Manager for SSL (infrastructure as code via Terraform).
- 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*.
- Onboarded and trained, in both project tech-stack and methodology, ~20 developers.
- Led Scrum meetings on all projects, i.e. backlog refinements, technical grooming, and sprint planning.

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. Including: HUDs, scoreboards, leveling systems, administrative systems and mini-games.
- 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.

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**)
- Received the Collyer's Academic Progress award following nomination from Computing teacher for exceptional performance.

Side Projects

Icarus: a tiling windows manager, featuring gaps, created for MacOS. Implemented using a *binary space partitioning tree* plus custom algorithms for efficient querying and layout computations. Can be attached to any graphical interface, such as the DOM of a web-page.

BradensPoon: enables MacOS users to create new Terminal windows by dragging a selection box over the screen. Published a technical article detailing how it was built, which got over 1,000 upvotes on Reddit.

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

VULK: bodybuilding workout tracking app, built with React Native, centred around progressive overload and improvement-focussed analytics. Heavy focus on user-interface; with native-like gestures, animations etc.

Audio Synthesiser: built with MATLAB implementing several *ASP* algorithms (including *spectrogram editing*, *phase vocoder*, *ADSR volume shaping*, *wah-wah*, *flanger* etc). Intuitive GUI and effect pipeline enable some powerful creations.

Skills

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

Hobbies

Bodybuilding, entrepreneurship, and esports.