Ashley Baldock

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Highly experienced and post-graduate educated Software Engineer seeking an organisation to work with in making a positive difference to the world. I love working with ECMAScript, TypeScript, React, Node.js, and other web technologies to deliver user value through quality engineering. I enjoy constantly learning, understanding how things work, and sharing that process of discovery with others.

Working as part of highly agile development teams at a variety of organisations has given me a wealth of practical experience in effective teamwork and development methodologies. I'm passionate about iterative user-focused development, and I have a solid track-record of successfully delivering well engineered solutions to complex requirements.

GitHub - github.com/ashleybaldock   *Web* - morepossibility.com

Senior Software Engineer - More Possibility (London)   *March 2020 - June 2022*

- My own startup - Developing solutions for networked sculptural and architectural lighting control
- React SPA frontend with custom Redux/WebSocket communication layer
- Development of UI component library, custom components, Storybook etc.
- Backend using Postgres, Node.js/Express RESTful API, WebSocket
- Multi-platform build & deployment, ARM/Raspberry Pi, embedded (esp8266/esp32 etc.)
- C++/embedded development for addressable LED control - scalable to tens of thousands of fixtures
- Wifi mesh networking, distributed protocol design (UDP/TCP multicast, mDNS, IPv6, synchronisation)
- PCB/hardware design using Fusion 360 for additive manufacturing (3D printing)
- Product research & development, gathering requirements, working with customers, demos etc.
- Project management & planning, iterative/agile approach to both development and planning features
- Focus on data-led decision making and rapid validation of decisions via real world testing

Senior Software Engineer - Rooster Money (Remote)   *February 2019 - February 2020*

- React based eBanking app development
- Redux state management, Webpack buildchain, TypeScript, Rxjs
- Building interactive React components using SVG, HTML and CSS (including animations)
- Migration of existing class-based React components to function-based
- Developed custom Redux middleware to support event proxying and WebSocket connection
- Set up and maintained a React component library for the team based around npm and Storybook
- Maintenance and extension of legacy backbone/handlebars based app
    - Developed & implemented plan to migrate the app fully to React
    - Lead project to rationalise state management & routing across multiple micro-frontends
- TeamCity configuration and build chain maintenance, Cordova cross-compilation & packaging
- Cross device testing on iOS and Android, via simulators and real devices
- Took on technical lead role for the team
    - Mentoring and support for more junior members of the team, particularly around React
    - Decisions around application architecture, provided code review and critical analysis
    - Ran an internal React guild to help level up frontend developers within the wider organisation
- UX design with focus on accessibility and ease of use for wide age range

Senior Software Engineer (Contract) - Kwerk (Remote)   *July 2018 - January 2019*

- Worked as sole developer with early stage startup to produce their MVP
- Full-stack development and maintenance, React SPA, Node.js/Express, TypeScript & ES6
- Cloud architecture, git-based deployment via Jamstack/Netlify edge CDNs
- Cloud hosted MongoDB backend, RESTful API implementation
- Google auth integration, configuring analytics/tags, data processing etc.
- Webpack/transpilation pipeline, npm, build setup (including linting and test tools) etc.

Software Engineer (Contract) - Department for Education (London) *December 2017 - March 2018*

• Led development of beta phase of web application for new teacher recruitment platform
• C# .NET core, MVC/Razor, Entity Framework core (using migrations)
• Designed Postgres backend, utilising extensions for location/distance search, cloud hosted
• Used progressive enhancement design focusing on full functionality in basic browsers
• Microservices architecture (OpenShift, including experience building out environment)
• Implemented view of search results using Google maps API (JS and non-JS)
• Spread knowledge about agile working practices to the wider organisation

Software Engineer (Contract) - Cambridge Intelligence (Cambridge) *April 2017 - August 2017*

• JavaScript graph data visualisation product, KeyLines
• Adding new features to core product, including 'combos' - grouping graph nodes
• Producing and fixing product demos (including work with React and Neo4j database)
• Work on core SDK site (Node.js/Express web application)
• Exposure to a wide variety of JavaScript-related technologies, including ES6
• Extending and maintaining WebGL and Canvas rendering engines
• Implemented improvements to build/deployment process, including:
    • Switch to using Docker (with EC2/lambdaCI) for deployment
    • Automated linting (ESLint) and test coverage (Mocha/Chai)
• Improving MongoDB integration, including upgrade from legacy version of mongo-connect

Career break *February 2016 - March 2017*

• I took a year out from full-time work to travel and invest in my open source projects

Software Engineer - Redgate (Cambridge) *April 2015 - January 2016*

• Working as part of the team tasked with resurrecting SQL Monitor for its' v.5 release
• This included development of two entirely new features, implementation of a new build process and rapid release cycle, bug fixing (including security issues) - all within the context of a poorly documented legacy application
• Replaced slow-running SQL integration tests with rapid virtualised testing approach
• Pioneered use of TDD where appropriate during development, including use of nUnit/nCrunch
• In the technical lead role for our team I guided decisions around development methodology, technology choices, automated testing, and agile methodology
• Configured and maintained JIRA, setup for hybrid SCRUM/Kanban development process
• Participated in code katas and internal hackathon type events.
• Presented frequently at internal knowledge-sharing presentations (on topics like TDD and unit testing)

Software Engineer - 1E (London) *June 2012 - March 2015*

• Working on an agile team developing software using C# .NET, C++ and JavaScript/AJAX
• Extensively used Visual Studio with ReSharper, Vim, NuGet, TeamCity, Git & more
• Learnt, used and improved skills with pair programming, code review, CI/CD, TDD, IoC/DI
• Advocated for test-driven development and gained experience with NUnit, NSubstitute, Fluent Assertions, Moq, SpecFlow & PowerShell (for automated acceptance/integration testing)
• Previously I had worked on a data visualisation application for Nomad (WAN optimisation and file distribution application) using D3.js, jQuery, SignalR (WebSocket RPC) and WCF/COM

MSc Computer Science - Birkbeck College, University of London *2011 - 2013*

• I attained my MSc studying part time while working full time at 1E as a Software Engineer

Development Support Engineer - 1E (London) *March 2010 - May 2012*

• Sole responsibility for development and QA infrastructure supporting a team of 90 people
• Maintained Windows cluster, Hyper-V hosts, test labs, TeamCity CI system, SVN/Git etc.

Product Support Engineer - 1E (London) *November 2008 - Feb 2010*

BA Philosophy - Kings College, University of London *2004 - 2008*