Matthew Tole

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Full stack Javascript engineer with over five years frontend and backend development experience. Excited by learning new skills and technologies and passionate about building reliable and scalable apps and services.

WORK EXPERIENCE

Software Engineer, Fitbit

San Francisco — December 2016 - Present

Managed and implemented the end of life plan for Pebble web services with the goal of reducing financial and maintenance costs whilst still the retaining end user experience.

Designed and built a Node.js **GraphQL** API server that is part of a planned Fitbit app gallery.

Web Developer, Pebble

Redwood City — May 2014 - December 2016

Rebuilt the developer website from the ground up using <u>Jekyll</u>, with several custom <u>Ruby</u> plugins including code to parse, reformat and render complicated documentation.

Responsible for maintenance and new development on the Pebble appstore and developer portal, which were both <u>Ruby on Rails</u> apps with <u>Coffeescript</u> and <u>Angular</u> frontends.

Was a key member of the team that worked on incrementally rewriting the entire Pebble web stack to use <u>Node.js</u>, mostly using the <u>Koa</u> framework with a <u>MongoDB</u> backend.

Architected and implemented a <u>Kafka</u> data pipeline to handle all of the analytics and health data being generated by our millions of watches. Wrote JS and <u>Python</u> libraries to ensure consistent data access all the producers and consumers.

Consultant, Proven Legal Technologies

London — 2010 - 2014

Created a complex internal web application in <u>PHP</u> that handled evidence tracking, client invoicing, project management and work logging across the whole company.

Rewrote the web application in Node.js using a <u>MongoDB</u> backend with <u>jQuery</u> and <u>Angular</u>. In addition it used <u>WebSockets</u> to allow for real time updating of information between users.

Programmed several small forensic utilities in <u>Python</u> and <u>C#</u> for finding and analysing fragments of data from unallocated sectors of hard drives, and for manipulating and converting data taken from proprietary corporate systems, including audio recordings from commercial shipping vessels.

GIS Consultant, ESRI (UK)

Aylesbury — 2007 - 2008

Provided internal technical support and training for the company's intranet system to members of staff at all levels.

Worked in a small team handling the upgrade of the system to Microsoft SharePoint 2007.

Continued development of existing internal <u>C#</u> web applications that were used by senior management to track consultancy projects and allocation of resources.

EDUCATION

MSc Computer Forensics

De Montfort University — 2009 - 2012

Learned the fundamentals of digital forensics including taking a forensic images of a variety of data sources, and the processes and methodologies of forensic analysis.

Also studied a range of network security topics including penetration testing and Internet protocols.

Took part in a nationally recognised two-day expert witness training course.

BEng Computer Science

The University of York— 2005 - 2009

Gained an extensive understanding of a wide range of topics in computer science, from digital electronics through to operating system design.

Studied a wide range of different subjects including the fundamentals of programming, artificial intelligence, computer vision, human-computer interaction, algorithms and data structures, and system design.

PERSONAL PROJECTS

Pebble Apps

Designed, wrote and maintained several popular apps for the Pebble platform, all of which were open source projects and are available on Github (https://github.com/smallstoneapps).

Was invited to attend all three Pebble Developer Retreats in recognition of my contribution to the developer community and the popularity of my apps.

Provided support and guidance to other Pebble developers through the forums and chat rooms, and founded the London Pebble Developer Meetup to help share knowledge and experience.

Web Apps

Implemented a web version of the Codenames board game using <u>Express</u>, <u>Vue.js</u> and <u>Socket.io</u>, <u>SASS</u> and <u>Webpack</u>, the code for which is open sourced on Github (<u>https://github.com/matthewtole/codenames</u>).

Created a service for easily previewing pull requests on websites built using static generators, such as <u>Jekyll</u> or <u>Middleman</u>. The management API is built with <u>Node.js</u> and the build servers are <u>Python</u> scripts running inside <u>Docker</u> containers. The landing page for the service which can be found at http://staticpreview.com/.

Websites

Designed the website for my upcoming wedding (<u>katherineandmatthew.wedding</u>) and my personal website (<u>matthewtole.com</u>). Both are fully responsive and created to be both beautiful and functional.

SKILLS

Programming Languages

Javascript, HTML, CSS, SASS, Ruby on Rails, Python, C, C++, Coffeescript, Go

Tools

Git, Docker, JIRA, Photoshop

Miscellaneous

Puns, baking, cooking, origami, indoor rock climbing, running