Michael C. Brook

http://michaelcbrook.com/

Full-Stack Web Developer & Designer

Summary

I do almost everything web-related. I am a backend and frontend web developer and designer with over 8 years' experience using some of the most popular programming languages and server platforms on the web. I am very comfortable with every aspect of the stack, from server deployment to UX design. What I possess in technical ability, I also demonstrate in creative skill. I have created mobile apps and web services that are used by thousands of people every day. I am extremely resourceful and a quick learner. Solving problems using technology is my forte.

Technologies

Very Proficient

- HTML / HTML5
- CSS / CSS3
- JavaScript
- PHP
- MySQL
- jQuery
- Prototype
- JSON
- XML
- AJAX
- Nginx
- Apache
- Linux (mostly Ubuntu or CentOS)
- Amazon AWS (EC2, RDS, S3, SNS, SQS, SES, Route 53)

Moderately Proficient

- Java
- C / C++
- PostgreSQL
- Node.js
- Android
- Lighttpd
- Rackspace

Practical Applications

- Scalable server architecture
- Distributed task queues & batch processing
- Git repositories & deployments
- Data deduplication systems
- Opcode & memory object caching
- Push notifications (using Node.js)
- Image, audio, and video processing
- Data mining & web crawling/scraping
- Bulk & automated email systems
- Natural language processing
- Information security & encryption
- Content management system development
- Facebook Login & Graph API
- API development
- SEO & social media optimization
- Responsive UI & UX design
- Android app development
- Graphic design

Other Interests

- Photography
- Video editing
- Racquetball
- Hockey

Education

B.A. Legal Studies *Class of 2012*
University of California, Santa Cruz

Leadership

In addition to my technical expertise, I also bring years of leadership experience. Because of my diverse background as an entrepreneur, I have often been suited with the task of team management and visionary direction. Many times, this involves keeping team members focused on the task at hand, effective time management, milestone delivery, mediating disagreements between team members, assisting team members with problems or questions, providing constructive feedback that is both beneficial and non-confrontational, and being patient when patience is due. When I have not managed a company, I have often been the lead on several development projects, working with teams anywhere from 5-20 people.

Experience

Web Developer & Sysadmin, *Shift Interactive* *October 2014 - January 2015*

Shortly after moving to Des Moines, Iowa from California in late September 2014, I started work as a web developer for a company called Slash/Web Studios. Two months later, Slash/Web had merged with Shift Interactive, a web development company in West Des Moines. Across my time at both Slash/Web and Shift Interactive, I managed a plethora of tasks starting in web development and ultimately moving into system administration. My responsibilities included, but were not limited to, maintaining websites built in MODX and WordPress, performing CMS upgrades, administering several shared servers, working with Git repositories, deploying projects to development and production environments, installing SSL certificates, securing servers with SSH keys and secure configurations, diagnosing resource constraints, rewriting backend processes to perform at scale, automating recurring processes, interacting with clients to solve technical issues and/or discover project requirements, and providing insightful cost-benefit analysis at the intersection of technology and business operations.

http://interactiveshift.com/

Founder, *Songtwist* (in stealth mode) *2012 - 2014*

I built Songtwist, a promotional music service, entirely from the ground up. Broadly, I created and implemented the frontend design, all backend processes, and API's for

interacting with Songtwist's mobile apps. More specifically, my tasks involved creating a scalable server architecture, distributed task queues for image and audio processing, deduplication systems for user-uploaded content, automated email systems for account notifications, a Facebook Login system for user registration, SSL configuration, and implementation of best security practices. I also authored over a dozen libraries and command-line tools using JavaScript, PHP, Bash, and C, including a file upload library and a tool for converting audio to a set of integral peak values. These projects will soon be open-sourced and available at http://michaelcbrook.com/code.

http://www.songtwist.com/

Founder, *BluePlaylist* *2010 - 2012*

In 2010, while attending UC Santa Cruz, I launched an all-you-can-eat on-demand music service that resulted in over 100,000 registered users, over 60,000 installations of the mobile app on Android, and several thousand installations on the BlackBerry PlayBook. During BluePlaylist's entire existence, I have remained the sole owner and developer of the service, including its mobile apps. Shortly after its launch, BluePlaylist gained considerable recognition from news media outlets and was often cited as one of the best music apps of its time. At one point, I had presented the business to investors from Google, Adobe, and staff at the University of California, Santa Cruz, but development on the service was eventually halted after concluding the business was unsustainable. The experience I gained from BluePlaylist, both technically and personally, is exhaustive.

http://blueplaylist.com/

Web Developer, *The Actus Group* *June 2010 - September 2010*

Over the course of one summer during college, I worked for The Actus Group, an investment firm in San Jose, CA. The objective was to create a web service where users could bid on movie tickets. I was hired primarily as a frontend web developer and designer, but I was also delegated the responsibility of registering the domain name, setting up the initial server environment, developing search algorithms, and assisting in database administration. I worked side-by-side with a team of five, including Ph.D. computer scientists, eBay employees and patent-holders. Aside from frontend design, one of my main accomplishments included developing a complex Natural Language Processing (NLP) algorithm to search for movie times and purchase tickets via text message. Probabilistic parsing, information extraction, named-entity recognition, the Levenshtein distance, phonetic search, and location-aware geospatial search were used heavily to develop the algorithm, and the PayPal API was used for payment processing.

Founder, *TalkAddict* *2009 - 2010*

TalkAddict pivoted four times throughout its life from a social network, to a communication forwarder, to a web-SMS gateway, to a social network aggregator. However, the bulk of my work took place when it was a social network aggregator. As the only developer, I designed and created the frontend and implemented backend systems for "page scraping" status updates from Facebook, Twitter, and Myspace. Users were able to both read from and post to all of their social networks at once via either the website, text message, or instant message. Additionally, I created a web-based instant messenger and implemented systems that could automatically forward updates to a user's phone when they were detected to be offline, as reported by their instant messenger. This was done with a C library called Libpurple, for which I later went on to provide tutorials to developers learning to write instant messaging applications. These tutorials are available at http://libpurple.com/ and my code has been used by developers all over the Internet.

Developer & Maintainer, *Various Websites* *2006 - Current*

I have created a multitude of websites for businesses, schools, and organizations. I have seen all of them through from server deployment to design, and for several, I have created completely custom content management systems.

2013 **map-builders.com** *High-end land development company*
2012 **pmsaccounting.com** *Property management accounting company*
   rebuildersinc.com *General building contractor*
2010 **trivalleyrental.com** *Retail party rental store*
   ✓ *Website produced ~$45K in sales in less than a year and a half*
2008 **3rlatex.com** *Latex paint recycling company*
   nuviewbridgeechs.org *My high school (no longer in existence)*
2007 **mymediahotspot.com** *Media sharing service (no longer in existence)*
2006 **michaelcbrook.com** *My personal website*
   ✓ *Listed in Top 10 Media Websites on StumbleUpon for music*

Visit http://michaelcbrook.com/portfolio for a full list of my projects.