

ABOUT ME

A curious and diligent software engineer. The sole employee of *Briar Patch Software* as an R&D scientist seeking to apply machine learning techniques to mobile application development.

Cameron is professional, user-focused, and constantly learning and improving – not just himself and our software, but also the tools other developers use. He has no problem thinking big picture while maintaining focus on the problem at hand. Despite having his responsibilities multiplied, he's still responsive to requests for recommendations or assistance. He's also saved my ass on at least a couple of occasions and has likely done the same for others around here. I think Cameron is a developer worthy of others emulating and should continue to be recognized for his outstanding work.

– Employee of the Month, 04/2016 | Nomination by Chief Architect @ FocusVision

EXPERIENCES

Research & Development Dec 2016 – Jun 2017
Briar Patch Software

As the founder (and only employee) of Briar Patch Software, we're in the early stages of applying machine learning techniques to mobile application development. Primarily, we aim to deliver great software experiences through useful applications of solutions to problems in time series classification, computer vision, and optical character recognition.

Please see what we're currently working on in the **Projects** section below.

Site Reliability Engineer Nov 2015 – Dec 2016
FocusVision

As part of the small SRE team at FocusVision, we were essential to improving and maintaining the organization's systems and productivity. We worked side-by-side with almost every role in the company, focusing on the development, deployment, maintenance, security, automation, and documentation of our infrastructure, tooling, and operations. In pursuit of 99.9% availability and a self-healing, service-oriented architecture – we worked smart each day, learning perpetually and implementing boring solutions with clever tools to reduce complex problems.

Software Engineer Jun 2014 – Nov 2015
FocusVision

As a full-stack engineer part of an agile team, we used iterative and test-driven approaches to develop and maintain features in our production systems. Made large contributions to the design, implementation, and testing of our back- and front-end systems, APIs, and deployment pipeline used to support Decipher's award-winning survey building and data collection platform.

Technical Writer Nov 2013 – Jun 2014
FocusVision


Here we (a team of two) worked closely with the entire organization and its customers to develop the documentation necessary for all involved to properly use Decipher's software systems. During these few months, I gained a wholesome understanding of how to take a software engineer's specifications/release notes and compile them into an accessible, actionable, and simple online document that all users could benefit from. Author of the *Decipher Programming Manual*, a comprehensive guide to Decipher survey programming.


Survey Programmer Aug 2012 – Nov 2013
FocusVision




Cameron Briar


Software Scientist

 hi@cameronbriar.com

 +15597971882

 cameronbriar.com

 /cameronbriar

 Fresno, CA

EDUCATION

BS, Computer Science
Fresno State, California
2012

TECHNOLOGIES

Python (scikit-learn, pandas, TensorFlow, Django, Flask)

JavaScript (React-Native, Vue.js, Angular, jQuery)

*nix (GNU/Linux, RHEL, Debian, bash, awk, networking, security)

Version Control (Git, Mercurial, SVN)

Databases (PostgreSQL, SQLite, MySQL, MongoDB, Redis)

Config. Management (Ansible, Salt)

Cloud Computing (Google, AWS, Rackspace, IBM SoftLayer)

Web Servers (Apache, nginx)

Other Languages (Go, C++, R, LISP, Perl, Obj-C, Swift, Java)

This was a fast-paced environment where we worked closely with customers and their account managers to build online surveys from the customers' questionnaires – implementing the logic and question design to collect data across hundreds of thousands of respondents. The tools used to develop these surveys were mostly comprised of Python, JavaScript, XML, HTML, and CSS. Did you know FocusVision may have the world's largest Python codebase?

JavaScript Instructor

Feb 2016 – Apr 2016

Bitwise Industries

This was an exciting opportunity where I lead a six-week course of 20+ students to understand the fundamentals of programming and JavaScript. The most challenging part was creating and curating the course material to properly challenge each student regardless of their programming aptitude. After the course, I was invited to not only teach again, but to also join Bitwise Industries as one of their lead *Developer Fellows*.

Research & Development

Jan 2012 – Jul 2012

California State University, Fresno

Developed a system that we called FALT (Fresno Audiovisual Lexicon Tool) with Professor Lorin Lachs, Ph.D. of Psychology on behalf of the National Science Foundation to help investigate the similarities of phonemic and visemic communication.

IT Help Desk Support

Mar 2010 – Feb 2012

California State University, Fresno

As a first responder to Fresno State's students and staff, I provided technical assistance via telephony systems and support ticket submissions.

References furnished upon request.

PROJECTS

Flynt - (Currently in development @ Briar Patch Software)

Designed for iOS/Android mobile devices, Flynt uses the device's accelerometer and gyroscope to detect and train free-motion gestures to create an intuitive interface for counting things. To use Flynt, the user places their thumb on the object's label they wish to count and makes the gesture to update its count. Our early trials demonstrate that Flynt is significantly easier, quicker, and more efficient than traditional approaches. By default, Flynt is equipped with a simple *flick* gesture that was modeled using a semi-supervised machine learning classification technique – the user can train new gestures using the simple 3-step process in Flynt's *Training* mode.

Booksee - (Currently in development @ Briar Patch Software)

Designed for iOS/Android mobile devices, Booksee is a tool to find and catalog books on a bookshelf. Using the stream of images from the device's camera, Booksee automatically stitches together and generates a list of all the books it's able to see sitting on a bookshelf by the details of the books' seams. Machine learning, computer vision, and object character recognition techniques allow Booksee to help relieve that slow and painful, neck-kinked approach to discovering books on a bookshelf. If enabled, Booksee can also help connect readers to find the titles they're looking for – and even connect with Amazon's APIs to show the current sale price.

AWARDS

Employee of the Month
April 2016, May 2014

Innovator of the Month
May 2013

INTERESTS

Learning

Machine Learning

Cryptography

Research & Development

Free Software

Bioinformatics

Non-Fiction (mostly)

Space

Piano

Cooking

Hiking, Biking, & Boarding