# **COOPER BRISLAIN**

## Software Engineer – Full-Stack

cbrislain@gmail.com

Full-Stack Software Engineer looking to make an impact building systems that facilitate better discourse on social media.

Hayward, CA

707-980-2340

#### **TECHNICAL SKILLS**

PHP mySQL HTML5 SCSS Git Unity Flow-Based Programming C# LAMP Linux Node.js Javascript

JQuery Flash Real-Time Graphics Projection Mapping Agile Development Object Oriented Programming

Content Management Systems Adobe Creative Cloud Generative Art Integration and Automation Spline Reticulation

#### **EXPERIENCE**

### **Lighting R&D Engineer, Simple Machinists 2018**

- Collaboratively designed custom-fabricated parts for high-performance ARTNet LED fixtures for use at live events.
- Developed production, q/a, and asset tracking software using QR codes, Pub/Sub, and mySQL
- > Iterated on product design based on event post-mortem analysis.
- Researched and recommended parts, materials, and tools to meet production requirements.
- Analyzed failed units for causes and revised design to reduce or eliminate rate of failure.
- Proposed design recommendations based on common challenges encountered in event production.

## Motion Graphics Software Engineer & Visual Artist, Vektor Selektor 2011-present

- Created audio-reactive, realtime visual content for live events using Unity, Quartz Composer, GLSL Shaders and Processing.
- Design human-computer interaction schemes for controlling live visuals using control surfaces and gesture devices, including Wii Remote, XBox Kinect, LEAP Motion, and various MIDI controllers.
- Design LED and projection mapping for stages.
- > Solve complex technical challenges on location, using limited available resources.
- > Performed original content live before audiences of up to 10,000.

#### Software Engineer, BetterHelp 2015-2016

- > Worked on an agile development team to release iterative improvements to user experience based on data acquired from multivariate analytics.
- Utilized XDebug with PHP and NginX to identify bottlenecks and reduce landing page load time by 40%.
- > Developed automated qualification and approval for financial aid applicants, freeing significant customer support resources.
- Integrated billing system with Paypal's Braintree API, standardizing payment flow and allowing acceptance of new payment methods.
- Created super cool Slackbot integrations and emojis to improve team communication and morale.

## Software Engineer, Visions in Education 2015-2016

- Modernized student information portal.
- > Standardized course catalog and event listings in content management system.
- Audited Wordpress extensions and determined optimization strategies to minimize overhead and points of failure.
- > Audited git repository and codebase diffs to determine points at which undesirable behavior was introduced.

### Lead Software Engineer, Taylor Online Marketing 2010-2017

- Designed mySQL database for auto-shipping leads.
- Built RESTful API for partners and affiliates.
- > Created embeddable form widget for use by affiliates and partners.
- Redesigned system for greater extensibility, increasing lead volume and providing additional cross-selling opportunities.
- Designed tools for the reporting and visualization of lead data.
- > Improved efficiency and agility by automating frequent or time-consuming tasks.

### Software Engineer, Design Reactor 2008

- > Developed interactive Flash landing page for Disney Parks 2008 campaign.
- Produced pixel-perfect web materials for marketing campaigns, adhering to critical style guidelines.
- > Created rich, interactive user interface for agency portfolio, using Actionscript and Expression Engine.

### **Software Engineer, Jupiter Hosting 2007**

- Developed custom modules and features for Joomla-based content management system.
- Optimized mySQL gueries for highly trafficked websites.

#### **EDUCATION**

BA Film & Digital Media UC Santa Cruz 2003-2007

#### **COURSEWORK**

Abstract Data Structures Algorithms X86 Assembly Differential Equations Discrete Math Linear Algebra Logic

Digital Media Production Film Studio Production Documentary Production Film Theory Digital Media Theory

Social Documentation Java Programming C++ Programming AP Computer Science Cisco Networking

#### **INTERESTS**

Computational Culture and Social Relations Generative Art Flow-Based Programming Burning Man