COOPER BRISLAIN

Software Engineer • Creative Coder

Interdisciplinary Software Engineer and Visual Artist seeking a role on an agile team inventing tools to support development and content creation.

TECHNICAL SKILLS

- Full-Stack Development
- Git
- Javascript
- JQuery
- Node.js
- Unity
- Shaders
- C#
- LAMP
- Linux
- Apache
- PHP
- mySQL
- HTML5
- SCSS
- RegEx
- Flow-Based Programming
- Actionscript/Flash
- Content Management Systems
- Real-Time Graphics
- Projection Mapping
- Video Production
- Creative Coding
- Arduino
- Adobe Creative Cloud
- Generative Art
- Integration and Automation
- Experience Design
- Rapid Prototyping
- Vagrant
- Spiline Reticulation

EXPERIENCE

Lighting R&D Engineer, Simple Machinists 2018

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- adobe-creative-cloud
- git
- arduino
- generative-art
- integration-and-automation
- trello
- agile-development
- projection-mapping
- rapid-prototyping
- experience-design

- Collaboratively designed custom-fabricated parts for high-performance **ARTNet** LED fixtures.

- Delivered **150 LED fixtures** in time for use for installations at live events.

- Developed production, q/a, and **asset tracking software** using **QR codes**, **Pub/Sub**, and **mySQL**

- Developed qa and diagnostic tools using **Arduino**

- Designed custom **3D-printed** parts to improve durability and normalize assembly.

- Made design recommendations based on common challenges encountered in **event production**.

Motion Graphics Software Engineer & Visual Artist, [Vektor Selektor ↗](#) 2011-present

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- adobe-creative-cloud
- arduino
- unity
- flow-based-programming
- c#
- real-time-graphics-for-live-events
- glsl-shaders
- quartz-composer
- projection-mapping
- photography
- generative-art
- video-editing
- blender
- glsl
- shaders
- experience-design

- 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

- adobe-creative-cloud
- php
- lamp
- linux
- apache
- mysql
- html5
- javascript
- regex
- full-stack-development
- git
- front-end-development
- agile-development
- trello

- analytics
- integration-and-automation
- refactoring
- scalability
- virtual-environments
- vagrant

- 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.

Software Engineer, [Visions in Education](#) ↗ 2015-2016

- adobe-creative-cloud
- virtual-environments
- full-stack-development'
- regex
- wordpress
- content-management-systems
- trello
- agile-development
- scrum
- git
- angular-js
- php
- html5
- mysql
- scss
- platform-migration

- 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.

- Developed strategies and solutions to avoid future complications.

Lead Software Engineer, [Taylor Online Marketing](#) ↗ 2010-2017

- virtual-environments
- system-administration
- php
- lamp
- mysql
- joomla
- wordpress
- git
- full-stack-development
- javascript
- jquery
- front-end-development
- flash

- content-management-systems
- linux
- apache
- nginx
- system-administration
- html5
- scss
- regex
- adobe-creative-cloud
- platform-migration
- integration-and-automation
- rest
- api
- plesk

- Designed **mySQL** database for auto-shipping leads.

- Built __REST__ful 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

- adobe-creative-cloud
- flash
- actionscript
- html5
- css3
- css
- quartz-composer
- lamp
- php
- javascript
- expression-engine
- jquery
- content-management-systems

- 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

- adobe-creative-cloud
- content-management-systems
- php
- lamp
- mysql
- javascript
- joomla
- flash
- actionscript

- Developed custom modules and features for **Joomla**-based **content management system**.

- Optimized **mySQL** queries 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

ASSOCIATIONS

- Visual Artist, Opulent Chill • 2017
- Visual Artist, Wormhole; Oakland • 2015–Present
- Visual Artist, Camp Question Mark • 2009–)?(
- Technology Director, SCTV; UCSC • 2005
- Student Trustee, Napa Valley College • 2002

INTERESTS

- Generative Art
- Flow-Based Programming
- IoT

CORE VALUES

- The end user's privacy and security is paramount.
- Monetization shouldn't compromise utility.
- The best thing to say when you don't know is that you don't know.