COOPER BRISLAIN

• Oakland, CA

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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 Node.js Unity Shaders C# LAMP JQuery Linux Apache mySQL HTML5 SCSS Bootstrap 4 RegEx Docker/Vagrant/VirtualBox/Parallels Flow-Based Programming Real-Time Graphics Projection Mapping Actionscript/Flash Content Management Systems Video Production Creative Coding Arduino Generative Art Integration and Automation Adobe Creative Cloud Internal Tools Development Slack/Trello/Google/Zapier Experience Design Spiline Reticulation

EXPERIENCE

Lighting R&D Engineer, Simple Machinists 2018

- 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 ga 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

- 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 to identify bottlenecks and reduce landing page load 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

- > 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

- 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

- > 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 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

Tools work for people, not the other way around.

The best thing to say when you don't know is that you don't know.

The end user's privacy and security is paramount.