COOPER BRISLAIN

Software Engineer • Creative Coder

Interdisciplinary Software Engineer and Visual Artist seeking role on a team developing innovative software around Augmented Reality, Virtual Reality, IoT, and other emerging fields.

TECHNICAL SKILLS

Full-Stack Development

Git   Unity

Flow-Based Programming

C#   LAMP   Linux

Apache   PHP   mySQL

HTML5   SCSS   Node.js

Javascript   JQuery

Front-End Development

Flash   Real-Time Graphics

GLSL   Shaders

Projection Mapping

Video Editing

Agile Development

Arduino

Content Management Systems

Adobe Creative Cloud

Photography

Event Production

Generative Art

Integration and Automation

Experience Design

Rapid Prototyping

Spiline Reticulation

Virtual Environments

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

- › 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.

› Developed strategies and solutions to avoid future complications.

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 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

Resident Artist, Wormhole;
Oakland • 2015-Present
Technology Director, SCTV;
UCSC • 2005-2006
Student Trustee, Napa Valley
College • 2001-2002

INTERESTS

Flow-Based Programming
Intelligent Lighting, LED &

Projection Mapping
AI and Consciousness
Synesthetic Experiences