COOPER BRISLAIN

Oakland, CA
707-853-3731
chrislain@gmail.com

Synesthetic Visioneer • Creative Coder

VJ and Software Engineer specializing in synesthesizing video production techniques with real-time environment parameterization, seeking opportunities to enhance event immersion and experience.

KEY SKILLS

Excellent written communication skills
Lifelong learner
Critical thinker
Ability to conceptualize complex systems
Adaptable and creative problem solving skills
Able to foresee potential future complications and constrains, designing for extensibility and scalability

EXPERIENCE

Lighting R&D Engineer, Simple Machinists 2018

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

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 testing tools for use in production and for field **diagnostics** using **Arduino**

Iterated on product design based on event **post-mortem analysis**.

Recommended parts, materials, and tools to overcome engineering challenges.

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

Developed and iterated **mass-production methodologies** to meet requirement.

Analyzed failed units for causes and **revised** design to **reduce or eliminate rate of failure**.

Made design recommendations based on common challenges encountered in **live 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, Xllox 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** team to release iterative improvements to **user experiene** based on data acquired from **multivariate analytics**.

Utilized **XDebug** for **PHP** to identify bottlenecks and reduce landing page load time by 40%, using caching, asynchronous loading, and optimized database queries.

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.

Audited Wordpress extensions and determined optimization strategies to minimize overhead and points of failure.

Brought outdated code repository up-to-date.

Audited 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 strict **style guidelines**.

Created **rich, interactive user interface** for agency portfolio, with dynamically populated content.

Software Engineer, Jupiter Hosting 2007

Developed custom modules and features for in-house **content management system**. (Based on **Joomla**)

Optimized **MySQL** queries for highly-trafficked websites.

Support Technician, UCSC Media Services 2006-2007

Set up and struck media equipment for **special events** and academic **productions**.

Provided **technical support** to students and faculty in the use of **media equipment** including **projectors**, **video cameras**, **audio systems**, and **computers**

Maintained readiness of equipment pool for rental and checkout, ensuring good working order, cleanliness, and presence of all included components.

Operated **service vans** on campus while observing high safety standards and awareness in accordance with an active campus with high pedestrian traffic.

Held keys and access codes to secure areas, media cabinets, and equipment closets throughout the university campus.

Event Crew, Plan-It Interactive 2000

Set up and struck large **interactive play systems** for **special events**.

Regularly loaded and unloaded **heavy** equipment.

Operated rock-climbing wall, ensuring the correct use of **safety** equipment and procedures by participants.

Performed on-site **troubleshooting and repair** of R/C cars.

Drove box trucks with trailers on highway to and from events.

TECHNICAL SKILLS

Full-Stack Development
GL
Unity
Flow-Based Programming
C#
LAMP
Linux
Apache
PHP
MySQL
HTML5
SCSS
RegEx
Node.js
Javascript
JQuery
Front-End Development
Flash
Real-Time Graphics for Live Events
GLSL Shaders
Quartz Composer
Projection Mapping
Video Editing
Agile Development
Trello
Creative Coding
Arduino
Object Oriented Programming
MVC
Content Management Systems
Joomla
Wordpress
Adobe Creative Cloud
Photography
Video Production
Generative Art
Integration and Automation
Spline Reticulation

EDUCATION

UC Santa Cruz – Film & Digital Media • 2007
Napa Valley College; Napa, CA – Computer Science • 2002

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, Warehouse; Oakland • 2015–Present
Visual Artist, Camp Question Mark • 2009–17
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.