

OBJECTIVE:

Creatively utilize my development and leadership skills to solve challenging sociotechnical problems.

TECHNICAL SKILLS:

Languages, Standards, and Frameworks: Full Stack JS and Blockchain Application Development, Solidity (Ethereum), JavaScript (ES6), TypeScript, Express, JQuery, React.js, Ember.js, CoffeeScript, HTML, CSS, SASS, JSON, APIs, Web Sockets, Socket.IO, PhatomJS, NodeWebkit, Bootstrap, Python, NoSQL Databases (Redis, MongoDB, Couchbase, Cassandra, ElasticSearch, Crate), SQL (Postgres, MySQL), C++, Intel OpenCV, C# (.NET), Edge.js, Microsoft XNA Real Time Networking, Reactive JavaScript, UI/UX, Behavioral Testing, TDD, Agile/Scrum Management, Dev-Ops (AWS, ELB, S3), Docker, Vault

Operating Systems and Server Environments: Linux (Ubuntu) with Apache, Nginx, and Node.js, Windows, MacOS, Docker, Ethereum

EDUCATION:

Jacobs University Bremen, Bachelors of Science in Information Management and Systems

2011– 2014

- Operations Management, Computer Science (Operating Systems and Databases), and Information Systems

Stanford University Coursework

Summer 2012

- Operations Management and Client Side Web Programming

EXPERIENCE:

Trunomi

2015 – 2017

A Fin-Tech Startup focused on data and consent management for banks seeking to comply with new financial regulations.

Lead Front-End Developer & Full Stack Developer (2015 – 2017)

- Architected and lead the implementation of the micro-services based APIs and data model for Trunomi's ledger based product. Designed the general project structure for Trunomi's codebase which is written almost entirely in TypeScript. Documented the APIs using the Swagger Specification and built an automatic code generation solution that allowed client services to be automatically generated. Designed and implemented a JWT based authentication scheme that is used for every current Trunomi API.
- Explored the use of the Ethereum Blockchain and Solidity-based smart contracts to augment the ledger based product.
- Built an "enterprise mock" which tested our APIs and provided a sample integration. Proposed and created a general Finite State Machine (FSM) tester which generates and runs tests for any possible state transition which is used to prove complete coverage of Trunomi's product.
- Architected and oversaw the implementation of the SDK used by partners to integrate with an older version of Trunomi's technology. This involves coordinating information with various stakeholders and designing technical solutions. The implementations use expressive functional and literate programming paradigms that promote the reusability and stability of the code base.
- Contributed to the product roadmap by designing new solutions based on an innovative solution to existing problems. The solution allows the user to compose complex workflows with a simple component UI which completely sidestepped the ordinary complexities of workflow management (rules) engines. The solution uses standards such as ASN.1/PCKS#7 to ensure security and multi-part messages to ensure compatibility with legacy workflows and extensibility.
- In charge of the development of Trunomi's cloud infrastructure's security solution. This involved managing a PKI and other secrets using Vault and Keybase as well as developing a toolchain and best practices for other developers.

Smaato

2014 – 2015

A German Ad-Exchange focused on mobile advertisement with over 80,000 publishers and 500 demand side partners.

Contracting, Software Engineer (2015)

- Developed a high throughput pipeline to test Rich Media advertisements for malicious behavior or illicit material. Used the IOJS engine to sandbox the advertisements and perform tests. Used a combination of PhatomJS and a custom C# HTML render to give the advertisement quality team safe previews of potential malicious advertisements.
- Developed a single page web application for use by the sales team. The application generates "Ad Tags" for client use. Prototyped the design using Adobe Muse. The application is implemented using ReactJS and NodeJS.
- Developed a web application for use by Smaato clients wishing to integrate video advertisements into mobile applications. Prototyped the application design using Adobe Muse. Implemented a custom OpenRTB 2.1 bidder for demand side integration with the Smaato network. Automated compliance testing of the VAST standard of advertisement. Implemented the web application using ReactJS with SASS. NodeJS was used for the backend.

Manager, Sales Engineering (2014 – 2015)

- Led a team to develop analytics tools to monitor ad-exchange health resulting in a 10x increase in the speed of queries. Developed the backbone of the system using NodeJS with some C and C# modules for high-performance. Amazon S3 buckets were used to retrieve and store data. Docker containers were used to manage component deployment. Implemented a client side React.js app that retrieves JSON data over HTTP and Web Sockets.
- Reported directly to the COO and Director of Global Sales Engineering. Was accountable for the health, maintenance, and growth of billions of daily impressions. Regularly managed the implementation of ad-hoc solutions. Interfaced with demand side platforms and ad networks to integrate their demand into the Smaato exchange.

• Phone: 404-502-7111 • E-Mail: mail@bradleat.me

inKibra

2013 – Present

A Startup focused on the creation of distributed social systems for license.

Product Designer, Systems Lead, and Founder

- Successfully solicited investments to fund the initial stages of inKibra Music development. Recruiting and consulting with musicians to prepare music for this format. Consulting with and training studio engineers to prepare music for this format.
- Leading the development of a new music format. Working with the Backend Systems Lead and Frontend Systems Lead to create a platform to stream and download interactive music. Used SASS, CoffeeScript+JavaScript (ES5 and ES6), to build the user facing web application. Used MongoDB and CouchBase for database needs.
- Developed audio editing and playback technology based on the WebAudio API. A visual audio editor was built using the aforementioned technology and encapsulated in NodeWebkit for distribution to studio engineers.
- Developed and designed a graph database which combines the in-memory functionality of Redis and its hash datatype, and the document caching of Couchbase for algorithmically optimal graph operations.

LessThan3

Summer 2012

A Stanford StartX-based startup developing a social music experience that was a finalist in The Walt Disney Company's Innovation Challenge.

Programming Intern (Summer 2012):

- Worked in a two-person programming team on video integration and item (song, video, and album) cataloging. Used CoffeeScript and Node.js to dynamically and asynchronously integrate items into their catalog.

Portal Games

2008-2011

Founder (2009-2010):

- Started an open-source team to develop a 3D Game Engine for Microsoft's Xbox 360 using XNA and C#. Worked on the development of a multi-threaded system that includes physics, AI, rendering, and support for FPS game mechanics.
- Developed a networking system to minimize the effects of latency by scaling server-client or client-client communication up or down depending on the relative visibility and proximity of gamer's avatars.

iHOT Robotics at AIS International School

2008-2011

Robotics Team Captain (2009-2010):

- Created an autonomous driving system for the FIRST robotics competition. The system, implemented in C++, used Intel OpenCV for vision allowing the robot to navigate the field, and target markers the system was trained to recognize.

Robotics Team Captain (2010-2011):

- Started a rapid prototyping team, improved efficiency, and raised \$10,000 to overcome a budget deficit while increasing national program ranking year over year.

NOTABLE EXTRACIRCULAR EXPERIENCE

- **President of the Student Government at Jacob's University** (2013-2014) – Meaningfully addressed student concerns over policies implemented by the school's administration (reversing some policies). Integrated students into the *Change Process*. Campaigned for and oversaw the transition to a revised constitution governing the student body. Created the biggest annual student festival at Jacobs. Cut costs and added new revenue. Established a system allowing for the hire of Student Assistants. Managed several student assistants.
- **President of Investment Club at Jacob's University** (2012-2014) – Taught value-based investment techniques to students. Chaired the Committee that recommended US-Based securities to Bremer Landesbank using value-based techniques.
- **Student Court Judge at Jacob's University** (2012-2013) – Evaluated the performance of student parliament, mediated student disputes, and liaised with the disciplinary board to handle student violations of university policies.
- **Secretary of the Student Government at Jacob's University** (2011-2012) – Founded the Constitution Review Committee. Hosted a mediation "summit" with the student parliament that addressed our structural problems with By-Laws.

HOBBIES: French (Fluent), German (Conversational), Scuba Diver, Flying, Swimming, Ultimate Frisbee, Football, Finance/Investment

NOTEWORTHY HONORS: *Jacobs University Scholar, National Merit Scholarship Finalist, and National Society of High School Scholar*
