

Software Engineer

### **Technical Skills**

# **Languages and Frameworks:**

Python, Java, JavaScript, TypeScript, PHP, C++, C#, Perl, Flask, Spring Boot, Express.js, CakePHP, jQuery, Next.js, Pytest, Unittest, JUnit, Jest Technologies:

PostgreSQL, MySQL, GoogleSQL, MongoDB, Google Cloud Platform (BigQuery, Cloud Build, Cloud Deploy, Artifact Registry, GKE), GitHub Actions, OAuth 2.0, WebSockets, Buildpack, Docker, Apache Maven, Webpack, Node.js, React, Redux Toolkit, Zustand, Apache Kafka, REST, GraphQL, HTML5, CSS3, Tailwind, Sass

# **Experience**

# **Cut Throat Marketing - Software Engineer**

2023-current

- Designed and implemented the CI/CD pipeline using GitHub Actions and Google Cloud Build, Artifact Registry, Cloud Deploy, Artifact Registry, and Google Kubernetes Engine to deploy new builds in under 10 minutes, improving the development cycle.
- Authored the API test suite using Unittest and Pytest to cover 72% of functions, and mocking API calls, ensuring that testing could be
  part of the CI/CD pipeline without endangering secret keys.
- Architected the Analytics Aggregation Engine using Python and Flask, using GoogleSQL to query sharded BigQuery datasets allowing
  for summarization before integrating with third party LLMs.
- Added an OAuth2.0 verification layer to limit API implementation to only organization members, which prevents access to individuals outside of the company and creates a layer of security for sensitive information.

# Kaffee (Open-Source Product) – Software Engineer

2023

- Created the Metric Subscription Service using Spring Boot and WebSockets to deliver Apache Kafka metrics data in a consistent encapsulated format, simplifying the addition of data visualizations on the application dashboard, updating every 10ms.
- Implemented Chart.js visualizations, allowing for the simultaneous viewing of over 10 real-time metric readings in a concise dashboard, improving user experience and allowing for real time Apache Kafka broker diagnosis.
- Leveraged React and Redux Toolkit to optimize UI component development and state management throughout the application, easing
  future development, and providing a consistent user experience across UI element transitions.
- Engineered the Historical Log Integration Engine, storing real-time metrics for display in the application's Historical Log page, utilizing the same Chart.js components that displays real-time data, providing a consistent UI experience.

# Kidzmet, Newport Beach, CA — Full Stack Engineer

2010 - 2012

- Diagrammed and created the core MySQL database, normalized to the third normal form, allowing for rapid integration of new features and information during the development process.
- Collaborated with management to design and create the Administrator Dashboard, providing a user friendly UI for management of users and leads, composition of regularly sent emails, and addition of blog posts.
- Spearheaded the establishment of bug triage and version control processes, using Subversion and Bugzilla, enabling swift addressing
  of application issues, efficient problem triage and escalation, and timely delivery of fixes often within 48 hours.

#### Reach Systems, Oakland, CA— Technical Support Engineer III

2007 - 2010

• Co-authored the Device and Application Test Platform, using BASH and C++ to verify expected device behavior during application and device development.

#### Pioneer Electronics, San Jose, CA — Software Engineer in Test

2006 - 2007

- Wrote integrated software tests using C++, Java and Perl for plasma televisions and Blu-ray players.
- Specialized in the technical requirements of Digital Living Network Alliance (DLNA) and Microsoft PlaysForSure network
  communication, delivering feedback to developers in bug triage and code review sessions to ensure adherence to certification
  requirements.
- Represented Pioneer Electronics in industry conferences and conventions regarding DLNA and PlaysForSure interoperability standards, providing up to date specifications and developments with other consortium companies.

## **Education**

### University of California, Santa Barbara - BS, Physics

2002 - 2006

# **Interests**

Video Games: Particularly strategy games like the Civilization series and Against the Storm.

Board Games: Especially complex board games, like Spirit Island, and Legacy games like the Pandemic Season series.