# Kerry Kartchner

Eugene, OR · tenebrus@ymail.com · https://kerrykartchner.com

## Proficiencies

*Full-stack development across SDLC phases from ideation through runtime operations*
*Mobilizing teams to deliver exceptional outcomes across boundaries with integrity and transparency*
*Mobile and Front-end:* Reactive (ReactJS,Svelte,RxSwift), typescript/JavaScript, iOS, Swift, HTML/CSS
*Backend:* Node.js, Java, C++, C, Python, ReST, SQL(MySql/Postgresql) Apache, Redis, AWS, Linux, BSD

## Employment History

### Intuit                                                          February 2012 - September 2024

#### *Principal Engineer*

**App Experiences Platform - Mobile "AppFabric"**
*Organizational Proficiencies:* Leading by Influence, Stakeholder Engagement, Architectural Design
*Key Accomplishments:*
- Drove strategic platform capabilities bringing analytics insight, development, and policy management features to 36 development teams across the enterprise
- Reduced deployment time by 14%, and app size reductions of 43% on average

*Technologies:* Node.js, iOS (Swift, Objective-C), typescript, Javascript, ReactNative, ReactJS, Java

**Generative AI**
- Architected mobile "SmartUX" components for Generative LLM experiences deployed to > 1M customers
- Coordinated code review and mentoring 9 for Staff and Senior developers on iOS and Android
- Design and coding for Plugin Registry enabling modular discovery for RAG integration to Generative AI experiences

**Secure Web & Mobile Client Networking**
- Revised design of Key Customer operational metric sharing for web experiences embedded across 3 turbotax apps
- Defined technical requirements and design for Network Data Layer & Network Error collection and coordinated development across BUs
- Design and development, and review for DNS-Over-HTTPS/TLS support for mobile security use cases
- Designed security policy assertion framework to allow runtime policy assertions in coordination with Security team

**Network Utility Services**
- Architected Coordination and technical integration into common logging, behavioral, A/B testing and utility services, plus implementation in ObjectiveC + Swift for iOS
- Designed and led development team of shared logging components for web and mobile clients to capture operational analytics, remote-version Upgrade management services
- Publish and Subscribe event management framework and integration into web & native mobile applications
- Reliable transmission module handling offline & intermittent collection of events
- Gathered requirements and stakeholder feedback into shared component interoperability across various product teams
- Developed Check Image Deposit Experience in ReactJS + WebRTC for web and mobile flows

#### *Principal Engineer/Architect*

**Enterprise Business Services - Marketing Platform**
*Key Accomplishment:* Rollout of first Enterprise Content Management System for Intuit SMB Channel Marketing organization
*Technologies:* Node.js, Ruby-on-Rails, Java, Amazon Web Services, SiteSpect, Ensighten, Adobe Experience Manager(CQ), CDH4(hadoop)
*Page Registry / Metadata services for registering page entities for marketing analytics*
- Detailed a complete architecture (competitive analysis, design, services, UI interaction flows, workflow process)
- Aligned with data analytics stakeholders and interfaced tightly with engineering teams
- Defined ingestion pipeline and refinery warehousing clickstream and 3rd-party data in Hadoop
- Communicated architecture with enterprise architects and business stakeholder for alignment

*AWS Hosting / Cloud Steward for Global Marketing Sites*
- Defined deployment and development architecture for migration to cloud hosting on AWS for Showroom and Novo projects
- Architecture for integrating testing services into AWS CI/CD pipeline
- Integrated best-practice performance monitoring design from Mint.com for global web marketing
- Refined deployment and development architecture for node.js deployment on AWS
- Implemented dynamic route synching for Node.js web tier fronting Adobe CMS, enable routing changes without deployment

***"Showroom" CMS* / Integration of Showroom Ruby-on-Rails application to Adobe CMS**
- CMS initial evaluation of requirements, vendor selection, costing
- Designed Architecture enabling dynamic serving of content combining RESTful services and content authored in Adobe EM
- Defined deployment and development architecture for migration to cloud hosting on AWS
- Defined technical integration architecture for integrating clickstream analytics, web hosting, CDN, and backend services with Adobe EM
- Implemented cookie governance monitoring modules
- Designed and implemented ReSTful services in Java, including EHCache integration

**Yahoo!**                                                              **January 2006 - February 2012**

## *Principal Engineer [IC5]*

***Flex Force (Tiger Team)***                                             **November 2009 - February 2012**

***Development Proficiencies:*** PHP, C++, Objective-C, Python, Zend extensions, opencv, MySQL, iOS, Scale

***Yahoo Technologies:*** shmproxy, vespa, ydbm, mdbm, ymdb, messenger protocol, yapache, YUI

***Yahoo Bubbles & Yahoo Local iPhone App* / Prototype to provide location-based chat and media sharing**
- Led development team in backend services, design and implementation phases
- Implemented photo sharing services and iOS UI integration
- Implemented proximity and neighborhood selection logic and interface

***Backend Services***
- Utilized C++, Perl, Java to extend existing functionality for critical partner integration to Yahoo Premium Billing Services
- Ad Server Monitoring - Wrote client library for Sherpa distributed hashtable service (Java) to provide histogram aggregation for Latency and Timeout metrics over various intervals

## *Senior Engineer [IC4]*

***Yahoo Buzz* / Content Aggregation**                                     **June 2008 - October 2009**
- Migration and production support for Buzz International GA release
- Rewrote and optimized vote aggregation server and asset management re-architecture
- Updated Moderation Review system with vote-spamming protection and integrated with mechanical-turk moderation system
- Standardized Web Service API layers and integrated Big Brother abuse filter integration
- python-based image-processing server (cropping, scaling, face detection [via openCV lib])

***OpenMail* / Applications that can plug into Yahoo Mail (Prototype)**            **January 2008 - May 2008**
- Initial design and investigation, requirements gathering
- Implemented Application storage and management for prototype
- XML over HTTP APIs to back client library interfaces

***MyM* / Yahoo Messenger for the Web interfaced with external social sites**              **2007**
- Developed Lattice web-service framework used across several Yahoo! properties
- Designed, implemented Social Network integration framework
- PHP-based shmproxy services [contrib to proxyio zend extension]
- Built XML interfaces for Messenger protocol for web messaging client APIs
- Contributed to design of vitality platform for integrating events on myM and Facebook/myspace/aol

***Photos* / Development and release of Yahoo Photos 3.0**                                  **2006**
- Built middle tier PHP interfaces to C++ APIs communicating over shmproxy
- Managed Pixami photobook servers
- Reorganized production monitors

# Education

B.S. Computer Science, Iowa State University
B.A. Linguistics, Iowa State University