.: **Chris J Keen**

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.: **Qualifications Summary**

- Front end technologies: JavaScript, SVG, Canvas, HTML5, CSS3, XML / XSLT
- Front end libraries: React, Apollo, Redux, Leaflet, Google Maps, D3, Bootstrap, Backbone, Angular
- Server technologies / languages: Node JS, Python, Ruby, PHP
- Server frameworks: GraphQL / Apollo, Hapi JS, Express JS, Sinatra, CodeIgniter, Django, Flask, JSP
- Node Build Tools: Webpack, Gulp, Grunt, Jake
- VCS: GIT, Subversion, GitHub [+Enterprise] (@zedd45), BitBucket, GitLab

.: **Professional Experience**

Keen Concepts   **2014 - Present**

Software Consultant (Various Clients: March 2014 – present)

Walmart Labs (August 2019 - present)

- Platform Team Architect responsible for evaluating & implementing next-generation "orchestration" server using Apollo GraphQL (GraphOS)
- Developed Authentication strategy for user scopes & enforcement, enabling separation for oAuth login for 3rd party vendors (e.g. Showtime) to prevent access to other areas of the site
- Implemented a fix for JWKS endpoint caching, which was preventing certificate rotation
- Designed & Developed a real time inventory and product recommendation APIs (Rich Relevance)
- Liaison between mobile apps and middleware team. Responsible for identifying areas of improvement, designing the solution, and identifying who and how the work would commence
- Technologies Used: Hapi JS, Node JS, Apollo GQL

Hilton Worldwide (hilton.com) (April 2018 – June 2019)

- Developed GraphQL queries that call Couchbase to retrieve data stored by Hippo CMS for branding
- Developed a GraphQL Mutation to block rooms for meetings & events to sunset a 10 year old Java 1.2 platform. Aggregated API calls to compose a payload which defines a new rate plan (including room costs & types, taxes, fees, length of stay), complete with emails.
- Technologies Used: GraphQL, Apollo, Node JS, Express JS, Jest

creativecircus.edu (September 2015 - April 2016)

- Devised lesson plans for, and graded, two different courses (available on Github: @zedd45)

www.vunify.com (June 2014 – November 2014)

- Utilized xCharts, D3, Backbone & Epoxy to render an analytics dashboard with charting
- Instituted Gulp JS for building Less assets with Karma + Jasmine with Ajax for unit testing
- Refactored the Algolia Python interface to parse a response for Multi-Queries (cross-collections - e.g., programs, playlists etc) into a single HTTP response for search results
- Technologies Used: Flask, Backbone, MongoDB, MongoEngine, Algolia, Grunt, Karma, Jasmine

Various Clients (Various Years)

- Edited *Data Visualization with JavaScript* for **No Starch Press**
- Mentor students on React & Redux & Express JS at **Thinkful Inc**
- Extended Leaflet framework in conjunction with Backbone to create a dynamic map application utilizing GeoJSON. This framework depicted energy savings at a household level, displaying extended information via Leaflet sidebar and other plugins for **IES**
- Utilized Gulp JS to run continuous tests via Karma, Integrating growl notifications.

Implemented common JS package management via browserify with pre-compiled handlebars templates and dynamic CSS includes via npm-css for **IES**

- Consulted on MEAN stack deployment for **Randstand** candidate search
- Volunteer Speaker at **JavaScript Atlanta**
- Refactored **Fantasy Coach** UI utilizing Marionette JS to replace symphony PHP, which improved page load times by an order of magnitude.

Amphora   2017 - 2018

Senior Software Engineer (September 2017 – April 2018)
- Redesigned an interface for commodities traders to leverage for calculating P&L for shipping metric tons of goods in Apollo React + GraphQL. I wrote resolvers that made calls to APIs or to data created by Casual for demos, as well as the react components in Semantic UI React
- Technologies Used: GraphQL Apollo, React Apollo, Express Node JS, Casual, Semantic UI

ZCo Acquisitions   2015 - 2017

UI / Node Architect (November 2015 – September 2017)
- Developed an E-Sports app in React & Redux complete with ~300 unit tests.
- Devised a process with scripts to validate translations input & output. The platform was fully internationalized (i18n) with the use of reat-globalize and deployed in six languages
- Setup an admin panel using Redux Saga that interfaced with a generation service to demo contests from start to finish. This included polling to notify the client scoring is complete
- Technologies Used: React, Redux [+Saga], Hapi (Node), Babel (ES6+), Webpack, Globalize, Docker, Karma, Mocha, Faker, JSON Server

Walmart Labs   2015 - 2015

Sr Mobile Engineer / Node JS Team Lead (February 2015 – November 2015)
- Designed a Hapi JS plugin that aggregated API calls with server caching which withstood 4.3 million page views per hour for the Sam's Club VIP Sale
- UI and Node JS efforts raised 0.02% conversion in February to 0.08% conversion by EOY
- Transitioned m.samsclub.com from the Bentonville datacenter to the cloud (OneOps)
- Developed speech recognition prototype utilizing Angular 1.4.x, Babel, ES2015 and WebPack
- Implemented a 'heartbeat' plugin that displays statistics including load, memory usage, current tag for each repo, API endpoints, etc. This also provided a means for the load balancer to preform a health check
- Supported Cart and Checkout redesign for 2015 by transforming responses from Oracle ATG and returning responses formatted & cached correctly for the Angular app
- Technologies Used: Node JS, Hapi JS, Angular, Can JS, Jenkins

Travel Syndication Technologies (AAA)   2013 - 2014

UI Architect (July 2013 – April 2014)
- Developed a Backbone component for Google Maps that lazy loaded via require JS to create a dynamic cruise itinerary with filters and a animated marker placement when updating
- Switched management of Less & Require assets from Play to Grunt. This allowed the removal

of Rhino, decreasing compile times, and removing the dependency on a hardcoded version of less in Play, thus enabling an to upgrade to BootStrap 3

- Created Grunt script utilizing promises to enable local dev and the build process to use the same top level design for generating assets in a race-condition free manner.
- Created a Grunt project for white labeling components, enabling clients to customize templates while validating the HTML. This included GIT and Jenkins integration for VCS + deployment to target environments.
- Implemented Dashboard 2.0 harnessing Play WebService to fetch static content from Nginx server, and cache it via play. This enabled consolidating client templates across environments.
- Designed Search Widget 2.0 for use across subdomains, adding event registration for 3rd parties. Utilizing Browserify and UMD enabled maximum compatibility across sites, while enabling modularizing of the code and stitching dependencies together.
- Technologies Used: Backbone, Grunt, Bower, Require JS, Less, Bootstrap, Play, SBT, Scala, Browserify, Nginx, RWD

Infor / Synergis   2013 - 2013

JavaScript Architecture Consultant (February 2013 – July 2013)
- Consulted on architecture for Infor **Ming.le** - enabling collaboration across platforms & apps
- Implemented custom "Smart Dialog" utilizing HTML5 contenteditable attribute with event listeners. Dialog allowed 'tagging' a user. Saving to LocalStorage to enable batching requests.
- Developed HTML5 Bulk FileUpload component with Flash fallback for IE, Image Carousel with Pagination, Overlay component with a dynamic dialog, Infinite Scroll
- Consolidated file structure and namespacing to reduce maintenance overhead. Defined a clear separation of concerns in UI code.
- Responsible for implementing unit tests, and training staff on their maintenance and execution
- Technologies Used: JavaScript, jQuery, Mocha JS, JSON, CSS3, Razor

CrowdStrike, Inc   2012-2013

Senior Web Application Developer (April 2012 – February 2013)
- Authored an internal API to index malware data using Ruby Sinatra to return paginated JSON responses from DynamoDB, including a file processing queue using cURL & SQS, complete with rspec / rack tests
    - Wrapped API calls in a UI using JSONP, Handlebars, and HTML5 validation. Implemented a light-weight, custom infinite scroll handler in JavaScript
- Developed Ember widgets using Ember Data ORM for REST calls, data persistence, and state transitions written in CoffeeScript and complied by Asset Pipeline, with Mocha JS tests
- Developed JSON responses populated via Express JS wrappers aggregating data from API calls
- Technologies Used: Node JS, Mocha JS, jQuery, JSONP, CoffeeScript, D3, Ember JS, Handlebars, Ruby, Sinatra, Rspec, Python, DynamoDB, S3, SQS, HTML5, CSS3, Ruby SASS, Bash

Endgame Systems   2011-2012

Senior Web Application Developer (November 2011 – April 2012)
- Crafted replacement for Google Earth Enterprise product using OpenStreetMap data and tiles styled in TileMill, served by TileStache, and interactions powered with Leaflet JS. This effort saved ~$500,000 per deployment (the cost of an enterprise license). I created a marker clusterer for leaflet that groups similar points on the map under one SVG circle.

- Optimized solutions / interactions for large data sets filtered through Solr (via Python), including jQuery Flot for charts and jQuery DataTables for rich interactive displays of tabular data
- Technologies Used: SVG, Leaflet JS, jQuery, Flot, DataTables, Python, Django, Solr, TileMill, TileStash

Weather.com   2010-2011

Senior Web Application Developer (July 2010 – November 2011)
- Co-developed the interactive map page, integrating the flash backend API with our JavaScript API
- Integrated Twitter onto the Today page, home page, and two new back-pages. This initiative was speculated to be worth 8-10 million. I developed the SVG / VML interactive 'Tweet Map', and visuals.
- My responsibilities ranged from on-boarding / mentoring of all front-end developers to leading development efforts on ad placement redesigns.
- Created presentations and Demos that led to the adoption of jQuery for the new site redesign.
- Created prototypes for Responsive Web Design and Flexible Box solutions for new pages.
- Harnessed geolocation, touch, and RWD technologies on the "Mobile Web 4" redesign project
- Technologies Used: JavaScript, YUI, Zepto, SVG, JSP, JSTL, Ruby SASS, CSS3, HTML5, TextMate, OSX

AutoTrader.com / AutoTraderClassics.com   2008-2010

User Interface Engineer / Team Lead (November 2008 – June 2010)
- Received the **Helping Hands Award** from Customer Operations for leading proactive enhancements
- UIE team lead on projects including: AutoTraderClassics.com, Consumer Site Loyalty & MyATC.
- Sole developer on two site-wide initiatives (Ads Framework Upgrade, Marketing Homepage & Header banners), while engaged on a third (Next Generation Model Info), for a total estimated increase of 1.5 million in revenue per year
- Proposed & implemented ad serving changes for a concise, consistent, performance optimized solution
- Integrated the Flash "hero" homepage ad and background images for site header into the CMS.
- Encouraged and participated in the addition of jQuery to AutoTrader.com
- Technologies Used: JavaScript, Prototype, jQuery, AJAX, CSS, XHTML, Java, JSP, JSTL, JSF, Subversion, Bash, OSX

Associate User Interface Engineer (March 2008 – November 2008)
- Received the **I Make a Difference Award** for outstanding dedication to the site.
- Exclusive engineer on UI Maintenance for AutoTrader.com. Responsible for all issue resolutions.
- Technologies Used: JavaScript, Prototype, AJAX, CSS, XHTML, Java, JSP, JSTL, JSF, Subversion, Bash

Intuit Financial Institutions Division   2004-2008

Web Software Developer (May 2006 - March 2008)
- Worked with jQuery to create rich interactions from carousels to dynamic crossfading banners
- Worked with "big tier" banks (**igobanking.com**, **flushingbank.com** etc) to create rich interactions and visuals
- After hours support responsible for completion of all SLAs for the day
- Technologies Used: JavaScript, jQuery, XSLT, XML, XHTML, CSS

Quality Assurance Analyst (November 2004 - May 2006)
- Organized and executed the development of intranet resources for training new employees
- Documented and published standard operating procedures for the QA department.
- Technologies Used: PHP, XHTML, CSS

Freelance Software Developer   **2004-2013**

rpmatl.com (2008 - 2012)

- Wrote custom framework / template to process web content. Created admin panel for the client to perform CRUD operations, including batch uploads for images complete with resizing & optimizing
- Technologies Used: Apache, PHP5, MySQL, XHTML, CSS, JavaScript, jQuery, GIMP, XML

Atlantic.net (2012)

- Created a series of jQuery UI powered filters that dynamically update results from AJAX, complete with an admin panel to allow the client to manage how the products and filters appear on the consumer site
- Technologies Used: jQuery, jQuery UI, ajaxQ, PHP5, Code Ignitor, HTML5, CSS3,

Undisclosed website (NDA) (2011)

- Modified Drupal code to switch transaction processing vendor to SOAP and send custom HTML emails
- Technologies Used: PHP5, Drupal, SOAP

HTML5 / Canvas Mobile Video Games

- Worked with friends to create an interactive, side-scrolling platform game, and a vertical space shooter
- Technologies Used: JavaScript, Impact.js

.: Additional Sites available on request

.: Education

A.S., Computer Science   University of North Georgia   Gainesville, GA

- Staff writer for the college newspaper, The Compass.
- Studied upper division Computer Science classes at the University of Georgia (BCS degree incomplete)

W3Schools

- HTML, XHTML, and CSS certified developer (circa 2005)