303.818.2914 | otoCarlson@gmail.com

A solutions-oriented Software Engineer with a keen focus on quality and diverse experience in the use and development of frameworks and APIs. Adept in driving technical strategy in alignment with unique client needs while providing architectural foresight to ensure flexibility, scalability, and reusability through Software Design Patterns and SOLID Principles. Through opportunities of employment and entrepreneurship, I target innovative approaches toward improving our quality of life and state of technology.

Experience

Industries | Applications: E-Commerce, Consulting, Advertising, Government/Investigative, Financial, Healthcare, Airline/Travel, Rental, Discovery/Collaboration Processes: Agile (Scrum, Lean), Kanban, Waterfall, Hybrid, None

Roles: Principal Front-End Architect, Principal Front-End Engineer, Consultant, Mentor, Lead Front-End Engineer, Front-End Architect, FullStack Engineer, FullStack Lead Projects: Greenfield, Legacy, Reboot, R&D/POC, Mobile, Hybrid, Responsive, Infrastructure, Integrations, Migrations

Environments: SPA (Single-Page Applications), ESA (Enterprise Scale Applications), Framework, Widget, Edge

Testing: TDD/BDD, E2E, Functional, Regression, Smoke, System, A|B / Multivariate, Feature Flagging, Manual

Specializations

JavaScript | TypeScript | Node | Angular | CSS | MEAN/MERN | MVA | OOP | TCO | Design Patterns | SOLID | Coupling | Cohesion | Abstraction | Normalization | Triage | Mediation | Reuse/Entropy | Complexity | Networks | ChangeCost | OperationalCost | Event-Driven Architectures | Distributed User Interfaces & Application Cores | PWA

Syntax | Language

Backend: Node, Python, ...more Data-Transport: XML, JSON, AJAX

Machine: Binary, Hexadecimal, Octal, Base64

Front-End: JavaScript (ES5+), TypeScript, JSX, CSS(2+), (X)HTML(4+)

Front-End

CSS: Bootstrap, Foundation, Stylus, SCSS, LESS **Build | Process:** Webpack, Babel, Gulp, Grunt, r.js

Templates | Mapping: Handlebars, Mustache, EJS, Jade/Pug, Dust, Rivets,

Interpolation, Content-Projection

Development: Angular, Svelte(kit), React, AngularJS, AngularUI, AngularMaterial, Angular-CLI Angular-Lib, React, ReactNative, RxJS, NgRx, Flux/Redux, Ionic, Ionic2, jQueryJS, jQueryUI, jQueryMobile, EmberJS, KnockoutJS, BackboneJS, UnderscoreJS, LodashJS, MomentJS, Socket.io, WebRTC.io, wsJS, VueJS, VideoJS, KarmaJS, Jasmine, Jest, Mocha, QUnit, Protractor, Intern, Selenium, BrowserStack

DOM: WebComponents (Custom Elements, HTML Template, Shadow DOM, HTML Slots), WebSocket API, WebWorker API, SharedWorker API, MessageChannel API, WebRTC API, Geolocation API, Notifications API, AppCache/Manifest API, Cache API, Background Sync API, File API, FileSystem API, WebStorage (LocalStorage, SessionStorage, IndexedDB), Canvas, Custom Elements, Video, Audio.

Backend

Object-Relational Modeling (SQL | NoSQL): Dynamo, Mongo, Postgres, ...more Framework | Library: Express, Sails, RESTify, Waterline (Object-Relational Modeling), Sequelize (ORM), Mongoose, Connect, Passport, Crypto, NodeUnit, Nodemon, Forever, Agenda, PM2, Puppeteer, ASP.NET MVC/Core, Rails, Java GWT.

FullStack | Front-End | Backend

Build | Deploy: Heroku, AWS, Release Candidate management, ...more
Analysis: Big-O Notation, UML, Sequence Diagrams, Modular Arithmetic
Tooling & Tracking: Chrome devtools, Postman, Jira, ZenHub, Trello, ...more
Authentication | Authorization: OAuth (+ PKCE), ClientLogin, OpenID Connect
Protocol: HTTP(S), WebSockets, SSE, CORS, TCP, CCNx/CCN/NDN/Mesh
Package Management | Version Control: NPM/NPX (Module System, Publish,
Repository), Bower, Yeoman, RequireJS, Browserify, Git, SVN, ...more
Web API | HTTP Interfaces: REST, RPC, Microservices, GIS, ... more.

Software Design and Engineering

Software Coupling, Cohesion, SOLID, Software Design Patterns, Algorithms & Data-Structures, UI|UX Design Patterns, JavaScript Design Patterns, MV*

Approach, Accomplishment and Implementation

PWA | Telemetry | Responsive Design | WCAG/508/ADA | I18n/L10n |
Distributable Core | Memory/Heap Profiling | OWASP Application Security |
Blackbox Analysis | Image Comparison | Custom Frameworks | RC Management |
Standardization & Styleguide | Interview & Hiring | Business Analyst | UX Designer
| Triage | Leadership/Direction, Evangelism | Successfully Running a Team of 8

History

Apr 2022 - Present [undisclosed] (FTE): [remote]. Senior Engineer

Oct 2021 - Nov 2021 Suite Studios (FTE): Boulder, CO. Principal Front-End Architect

Jan 2021 - Sep 2021 Alfi (FTE): Denver, CO. Principal Front-End Engineer

May 2015 - Jan 2021 Contracting & Consulting: Various. Available upon request.

Apr 2014 - May 2015 Colorado State, CDHS (FTE): Denver, CO. Lead Front-End

Nov 2013 - Feb 2014 PlaceWise Media (FTE): Denver, CO. Application Developer

Jun - Nov 2013 Active Network (C): Broomfield, CO. Front-End Developer

Apr - May 2013 Null Empire (C): Boulder, CO. Full-Stack

Jun 2012 - Jan 2013 BieMedia (FTE): Denver, CO. Software Developer

2008 - 2014 Volunteerism, Entrepreneurial, Training.

← (see curriculum vitae)

Maxims and Advocations

Testing | Documentation | Refactoring | Fail Early, Fail Often | Model & Domain Driven Design | Convention Over Configuration | LoD | CAMP | POLA | KISS | DRY | Design Systems | Algorithms & Data-Structures | Recursion | API Gateway | BFF | A11y | I18n/L10n | 'use strict'; | Sequence Diagrams | Git | OpenSource | Pair-Programming | Nonlinearity | Complexity | Scalability | Sustainability | Fault-Tolerance