

Experience

Principal Engineer^[1], Groupon

Jan 2012 - Current

- **Architect of web tier consisting of ~80 individual services**
 - Helped teams quickly ship products by streamlining common development tasks, creating helpful automation, and providing a well-documented platform handling core business needs and operational concerns.
 - Kept web stack up-to-date and competitive by monitoring industry trends, taking part in web standards discussions, and leading a team of three core platform developers.
- **Coordinator of Platform Development**
 - Ensured consistent practices and developer experience across stacks by facilitating a regular "framework roundtable" and acting as the editor for docs on using cloud-native technologies.
- **Maintainer of open source process**
 - Encouraged participation in the open source community by reviewing projects and code before public release, guiding engineers through safe and efficient use of OSS, and integrating open source practices into everyday work.
- **Lead Developer**
 - Supported the evaluation of a new business opportunity by creating a proof of concept and quickly iterating based on changing requirements.
 - Streamlined the localization process of ~100 services by designing and leading the implementation of a central localization system. Helped resolve scaling issues in both process and systems.
 - Enabled debugging across ~300 services in a distributed system by establishing common logging practices and working with different teams on implementation across stacks. Actively wrote low-level instrumentation code for Node.js, Java, and Ruby.

^[1] As "Principal Engineer" since Jun 2016. Previously everchanging titles on the way there.

Core Collaborator, Node.js

Apr 2017 - Current

- Unblocked a key V8 upgrade by implementing a new command line debugger (`node-inspect`) and working with other node core collaborators to bundle it with the main node binary.
- Supported the effort to make universal JavaScript modules a reality by implementing `import.meta` in V8 and participating in the modules working group.

Skills

Familiar with various stacks and technologies, fairly exceptional understanding of **JavaScript** in particular. Dusty knowledge of **computer graphics** where I spent most of my early life. Recently focussed on **web technologies**, **system architecture**, and **developer education**.

More importantly a knack for taking in the opinions, experiences, and motivations from various people and distilling them down to something everyone can agree on. And then explaining the result to others in a way that they can relate to.

Technical Skills

- **Got paid for:** JavaScript (node.js, express), C++, Java (JNI, Dropwizard, Spring, Android), Erlang, Objective-C (iOS), Groovy, Scala, Go, Ruby, PHP (Wordpress, yii, Symfony), CoffeeScript, HTML, CSS, Kafka, Storm, RabbitMQ, OpenGL, Jenkins, Kubernetes, Docker, Varnish, Nginx, MongoDB, Postgres, MySQL, CouchDB, Couchbase, Memcached, Redis, Elasticsearch, Jekyll, Git, SVN, Puppet, Vagrant, Helm, Envoy, mdns, Webpack, Gulp, Grunt, TypeScript, React, Preact, Angular, Backbone, REST and RESTful APIs, Swagger / OpenAPI, GraphQL, Distributed Tracing (Zipkin), Chrome Extensions, Compilers and Runtimes (babel/babylon, V8), Webdriver / Selenium, COM services, and Visual Basic for Applications (VBA).
- **Side projects:** DirectX, Haskell, OCaml, Clojure, Reason, C#, C++.NET, Lua, Swift, Object Pascal, Heroku (buildpacks), Vue, Ember.

Education

Computer Science and Philosophy, Universität Paderborn	2009 - 2012
Computational visualistics, Universität Magdeburg	2007 - 2008

Patents

- Michael Burton, Shaheen Ghiassy, Andrei Pitea, Adam Geitgey, **Jan Krems**, Daniel Beard, Matthijs Mullender, Luis Felipe Brahm-Smart (2017): Mobile service applications. Application is pending