{Mark: Cahill}

Senior Software Engineer and API Aficionado

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Experience

iHeartMedia
Senior Software Engineer
2018-Present
- Led a team of engineers in refactoring a Python form post application into an isomorphic React single-page application, visible at z100.com
- Helped develop a GraphQL API gateway for our public-facing microservices using Apollo, used by our mobile and auto clients and iheart.com
- Contributed to our layer 7 load balancer, used to route traffic in-farm on our edge compute platform, built on Kubernetes
- Developed a content auto-tagging system using Google's Natural Language API that allows us to associate keywords with an article and suggest other related content
- Assisted in the development of an enterprise-grade content management platform that allows us to syndicate content across multiple web properties similar to the Associated Press

StackPath, formerly Highwinds
Application Development Manager
2017-2018
- Managed an integration project that combined best in breed technology from MaxCDN, Highwinds, and StackPath
- Iterated on product feedback from our support team in order to improve user experience within the CDN portal
- Developed a training program for new hires that allowed junior developers to get up to speed quickly, and contribute code that ran in production within their first month

Highwinds
Software Engineer, Team Lead
2013-2017
- Built a fully-featured public API for managing configuration and purging content from the CDN, used by Microsoft, Valve, and Giphy
- Exposed a service that analyzed network performance from our CDN edge nodes worldwide to our customer's origins, used to develop advanced shielding topologies
- Developed an AngularJS single-page application that utilized our public API, ensuring first-class support for API integrators
- Built a test harness for both the UI and the API that allowed us to replace a legacy flex application in a test-driven way to ensure API backwards compatibility

YouVersion
Data Analyst and Developer
2011-2013
- Extended the Node.js telemetry system I developed at Analytical Labs to capture mobile telemetry data, including event and user flow data, and wrote backends to store the data in a variety of database technologies
- Developed a self-service business intelligence application in JavaScript and Python that integrated with BigQuery and enforced row-level multitenancy, allowing content providers to see their content's performance on the platform
- Developed and maintained a petabyte-scale analytics pipeline on Node.js, Hadoop, and BigQuery that allowed us to analyze 100 billion requests per year

Skills

Backend technologies
Go, TypeScript, Python

Frontend technologies
React, Angular

Database and cache technologies
MongoDB, ElasticSearch, BigQuery, PostgreSQL, Redis, Memcached

Web application frameworks
Chi, Express.js, Flask

Education

B.S. Computer Science
Stetson University
Partially complete

B.A. Communication
Palm Beach Atlantic University
Fall 2004

Open Source Contributions

node-telemetry
OSBI/node-telemetry
I built node-telemetry with the goal of making it easy to deploy a scalable telemetry server to capture errors, performance data, and more from web and mobile applications, and store it in a document store or on the filesystem. This was used at YouVersion to capture event and user flow data from over 120 million mobile devices.

Node.js
nodejs/node
Early in Node.js' history I helped port system calls in libuv from POSIX to Win32 API, allowing Node.js to run with native performance on Windows.