

# {Mark: Cahill}

Principal Software Engineer and API Aficionado

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## Experience

### Indigo Ag

#### Principal Software Engineer

2021-Present

- Architected the creation of a new on-farm data collection tool, providing key updates to our legacy tool to enable scale-up of existing business operations
- Led the effort to modernize our storage of application secrets in support of SOX compliance
- Coordinated a large and complicated effort to migrate to a new identity provider
- Established best practices for observability, infrastructure-as-code, and security
- Designed and executed on a multi-team initiative to integrate SSO and data sync with a strategic data partner and several other staff and principal engineers
- Played a pivotal role in the design and execution of load tendering, which enabled us to capture emergent carrier networks in code, leading to increased carrier engagement

### iHeartMedia

#### Senior Software Engineer

2018-2021

- Led a team of engineers in refactoring the software that runs sites like z100.com
- Helped develop a **GraphQL** API gateway for our public-facing microservices using Apollo, used by our mobile clients, auto integrations, and iheart.com
- Contributed to our layer 7 load balancer written in **Go**, 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

### 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 a single-page application that utilized our public API, ensuring first-class support for API integrators

### YouVersion

#### Data Analyst and Developer

2011-2013

- Developed a petabyte-scale analytics pipeline on Node.js, Hadoop, and **BigQuery** that allowed us to analyze 100 billion requests per year

## 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.