

# Hayden Wade

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## TECHNOLOGIES

## DAY-TO-DAY COMFORT

## HAVE EXPERIENCE WITH

- AWS
- Kafka
- Docker
- Node.js, JavaScript
- Redis
- Auth0
- Postgres, Elasticsearch
- Terraform

- RESTful APIs
- C#, VB .NET
- SQL, NoSQL
- React.js, Redux, TypeScript
- HLS
- Squadcast
- Grafana, Prometheus
- Jest

- Alexa Skills
- Azure, Heroku
- Bing Maps
- HTML5, CSS3, Bootstrap
- Angular, AngularJS
- Puppeteer, Protractor
- MongoDB
- socket.io

## EXPERIENCE

### STAFF SOFTWARE ENGINEER - VIDEO SERVICES PLATFORM AND API TEAM

**Alula, St. Paul, Minnesota, October 2021 – Current**

Worked with product owner to define and communicate requirements to new camera provider. Designed a secure and scalable solution to integrate new camera provider using **AWS**. Documented solution into work items and communicated solution with team after soliciting feedback. Provided estimates for completing the integration and highlighted cross team and external dependencies. Worked directly with new camera provider to ensure requirements met the specification and troubleshooted issues. Provided project status updates to project stakeholders. Enhanced backend services to support new camera models from existing camera providers. Scaled infrastructure to account for seasonal volume. Maintained and monitored **MSK** cluster and **RDS** Postgres cluster for organization. Mentored direct reports and defined a career path to increase employee retention. Transitioned off of the Video Services Platform Team and joined the API Team. Set goals and expectations with new team. Established new processes to increase team sprint velocity, reduce PR dwell time, and increase time to market. Primary technologies utilized: AWS, Node.js, Terraform.

### SENIOR SOFTWARE ENGINEER - VIDEO SERVICES PLATFORM TEAM

**Alula, St. Paul, Minnesota, October 2020 – October 2021**

Led mixed team of 5 remote contractors and FTEs consisting of software engineers and quality assurance analysts. Transferred ownership of infrastructure and code for the video services platform from contractors to internal team. Optimized video processing which reduced AWS EC2 **compute costs by 80%**. Identified and implemented changes to reduce AWS S3 **storage costs by 35%**. Evaluated multiple incident management software tools. Integrated incident management software into the organizations monitoring and alerting software. Architected, implemented, and load tested new data ingest pipeline for video platform using **Kafka** to increase scalability, visibility, and ensure system is fault tolerant. Designed and implemented provider agnostic platform to increase speed to market and decrease integration time. Worked with multiple camera providers to ensure hardware and firmware meet Alula's specifications. Maintained, monitored, and scaled core infrastructure for organization (MSK Cluster, RDS Postgres instances). Performed database migration in order to consolidate data centers. Implemented **HLS (HTTP Live Streaming)**. Structured the team around scrum/agile fundamentals. Worked with key business stakeholders to build and prioritize backlog. Interviewed, onboarded, and mentored a growing team of software engineers. Primary code utilization included Node.js, Jest, ffmpeg, and Terraform. Amazon Web Services: ECS Fargate, MSK, ECR, EC2 (VPC, ALB, etc), S3, RDS (Postgres), Redis, SQS, and SNS.

### FULL STACK SOFTWARE ENGINEER - ALULA CONNECT TEAM

**Alula, St. Paul, Minnesota, September 2019 – September 2020**

Architected and implemented a new time-series data pipeline for organization using **Amazon MSK (Kafka)**, wrote Terraform automation scripts to deploy necessary infrastructure for both the Kafka cluster and consumer ECS cluster. Utilized **Terraform** to build new monitoring platform for organization, consisting of **Prometheus** and **Grafana**, hosted and deployed in AWS. Implemented Prometheus service discoverer for ECS Fargate tasks. Implemented prometheus exporter for Burrow to monitor consumer group metrics. Enhanced and maintained multiple responsive web applications for home automation and smart security platform. Designed, implemented, and tested conditional rendering pattern to facilitate higher application maintainability and scalability (**Angular** and **React** compatible). Enhanced and maintained **TypeScript** library to provide reusable code for multiple applications. Led security initiatives by planning, analyzing, and architecting solutions across web and platform teams. Built out initial patterns and code base for consumer web application using **React.js** and **Redux**. Migrated features to new smart security platform to retire old application. Enhanced CI/CD pipeline with automated deployments. Implemented chat bot to facilitate QA processes using the **Hubot** framework. Primary code utilization included React.js, Redux, TypeScript, Angular, JavaScript, Postgres, Puppeteer, Enzyme, Jest, and Terraform. Amazon Web Services: ECS Fargate, MSK, ECR, EC2 (VPC, ALB, etc), S3, EFS, and CodePipeline.

### SOFTWARE ENGINEER II - NAVISPHERE VISION TEAM

**C.H. Robinson, Eden Prairie, Minnesota, January 2018 – August 2019**

Enhanced and maintained eCommerce application that provides customers a view into their global supply chain. Organized and led team of 5 engineers to build custom **Alexa Skill** and presented it to c-level executives, received budget to expand voice app. Worked closely with data scientists to provide in-app predictive analytics, researched 3rd party APIs, and created proof of concepts. Implemented new customers on a strict deadline. Streamlined customer implementations by designing, implementing, and testing new web application. Reduced customer implementation timelines by leveraging software and driving standardization. Built software to consume multiple sources of data from enterprise service bus (**RabbitMQ, Kafka**). Worked with infrastructure team to migrate our application to the cloud (**Azure**). Rewrote application from **AngularJS** to **React.js** with **Redux**. Built **npm** package to support authentication and authorization that is used across all micro services. As lead engineer on team I mentored a growing team of engineers. Improved teams interview process for multiple roles (SE, BA, QA, PM) and led technical phone screens and on-site interviews. Primary code utilization included React.js,

Redux, AngularJS, Node.js (Hapi.js), Docker, SQL, MongoDB, Elasticsearch, Enzyme, Jest, Nightwatch.js, and C# (ServiceStack).

## SOFTWARE ENGINEER I - GLOBAL FORWARDING TEAM

**C.H. Robinson, Eden Prairie, Minnesota, May 2016 - December 2017**

Worked on a team of 5 to design and implement micro-services to send and receive messages from U.S. Customs (ABI CATAIR). Refactored Pre-Arrival Processing System (PAPS) Angular web application with a responsive, mobile first design to enhance UX across wide range of devices used by truck drivers. Contributed to team of ~20 developers by leading **Angular** training sessions, being DevOps Advocate, and defining code standards for web applications. Built **nuget** package to support Role Based Access Control (RBAC) using **Auth0** and **ServiceStack** request attributes and plugins. Built shared **Angular** component library using **npm**. Leveraged unit tests and automated acceptance(e2e) tests to ensure code quality via CI/CD pipeline. Mentored interns as part of the Intern Program Committee. Primary code utilization included HTML5, Bootstrap, Angular, Protractor.js, Jasmine, C#, ServiceStack, and SQL.

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## EDUCATION

BACHELOR'S OF SCIENCE, SOFTWARE ENGINEERING  
University of Wisconsin - Platteville, September 2012- May 2016  
Magna Cum Laude, Deans List