

# Ashton Kemerling

# Experience

### 2020-Present **Engineering Manager**, DISNEY (ACQUIRED HULU), Remote.

Managing the State Authority team, responsible for all user content preferences and playback state. This is a team of eight engineers and a TPM, and it is responsible for two dozen high scale Java applications critical to the cloud DVR, user bookmarks, playback progress, and the "Continue Watching" user experience. This team is part of the "Unification" project, with the goal of producing a single set of backend services capable of supporting the varied feature sets of the various Disney Streaming products, including Disney+, Hulu, ESPN+, and Star+.

#### Detailed achievements:

- Engineering lead for a company wide initiative to introduce unlimited DVR to Hulu. Worked with existing design, front end, and middle layer teams to ensure backwards compatibliity, as well as design new caching layers to handle increases in backend RPS.
- Grew the team by 40%.
- Worked with product to design greenfield unified content preferences for all streaming platforms.
- Migrated all applications from on-premise services to cloud native and AWS hosted solutions ahead of company wide schedule.
- o Pioneered technique to store alert configuration in Terraform for better consistency and maintenance.
- o Managing a zero downtime, bidirection sync between unified and legacy datastores, to provide a seamless user experience across all device types during the Disney unification.
- Designed a "cold start" process to solve the very common problem of offline and nearline consumers needing access to bulk data from realtime systems. This pattern is now used throughout the entire company.

## 2020 Engineering Manager, HULU (ACQUIRED BY DISNEY), Los Angeles/Remote.

Took over the "DVR" team, which managed the Cloud DVR offering for the Hulu Live TV product. This team was eventually renamed to User Settings & Artifacts, which managed the DVR, user favorite content ("My Stuff"), and Offline Downloads.

#### Detailed achievements:

- Cut DRV cost by 75% without loss of performance or feature set.
- o First incident free Super Bowl for the DVR in Hulu history.
- Led team through an unexpected transition to remote work.
- Maintained lowest attrition rate in the department during 2020.
- Oversaw the team's transition from a narrow, feature specific team to a broad based platform team with multiple stakeholders and a wider customer impact.
- Created task force to drive technical standards forward, and end the long standing Hulu norm
  of every team having their own stack. The resulting standards were adopted by multiple
  teams, drastically improving on call performance.

# 2017–2019 Engineering Manager, EDMUNDS.COM, Los Angeles.

Responsible for the "Lead Systems" team. This team managed the web forms and backend systems that collected customer interest ("leads") in vehicles, and transmit that data to dealerships and the OEM. This was a critical component for our dealership sales, which accounted for 30% of company revenue.

- Planned and led the migration of dozen lead forms across the Edmunds website to a single, consistent, and easy to maintain React based form.
- o Designed and released a number of internal tools to improve lead form iteration speed.
- Created tools for product to introspect lead form behavior without engineering support, nearly eliminating internal support requests.
- Designed a system for protecting customer data in close collaboration with Data Analytics.
- Worked closely with Business Development to capitalize on limited time business opportunities.
- Only non-executive engineering representative on the hiring and titling committee. Picked new engineering interview tool, designed the interview loop, and rewrote all engineering titles and job descriptions.

#### Engineering

# 2015-2017 Senior Software Engineer, DRW TRADING, Chicago.

One of a small team responsible for maintaining a key middle layer in all DRW trading operations. The applications we ran both maintained a record of every financial instrument the company traded across multiple exchanges, and the trades and positions for each individual trading desk. Also provided key support to back office operations critical for compliance and risk management.

- Maintained trade critical systems in Ruby, Java, Clojure, C#, and Javascript.
- Worked on a small team that both maintained the company's trade & position store, as well as the trading instrument reference application.
- Did a complete rewrite of the script that imported financial futures into the company reference store for better performance and reliability.
- Wrote an application to assist the back office with bond calculations, producing results more accurate than what Bloomberg could provide.
- Helped maintain system uptime even during the record breaking trading days of Brexit and the 2016 election.
- Wrote multiple services to to automated end of day back end processes, saving dozens of hours of labor per week.
- Expanded and improved open source and internal devops tools.
- Administered over 100 internal servers and VMs.
- Maintained and improved existing Excel add-ons, written in C#.

## 2013-2015 **Software Engineer**, PIVOTAL LABS, Denver.

Helped maintain and grow one of Pivotal's only B2C offerings, Pivotal Tracker. I worked on both the back end and the front end of this application as we both expanded functionality and completely rewrote the user experience to the "Next" user experience.

- Used generative testing to find reliable reproduction steps for both long running bugs, and new bug reports. This tool and technique were turned into a conference talk at the Clojure Conj in 2014.
- Diagnosed and resolved a memory leak in Chrome, reducing memory usage by an order of magnitude.
- Finished years long migration from Rails 2 to Rails 3, including porting documentation critical rspec monkey patches.
- Completed complete rewrite of the SPA front end, closing out a years long fork of the front end with a carefully reconstructed git history.

#### 2012-2013 **Software Engineer**, NARRATIVE SCIENCE, Chicago.

- Sole engineer for company's only client facing product, Quill for Google Analytics.
- Maintained critical ELT pipelines for customer reports.
- Rewrote one-off data processing scripts into a predictable and reusable format.
- Led company wide effort to migrate to immutable infrastructure.
- Reworked CI/CD infrastructure for faster builds at a lower cost.