Bryan Grounds

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Senior Software Engineer | Full Stack   Whitepages   **JUL 2022 - MAR 2024**
- Engineered payment features, SEO & CRO initiatives, customer service & fraud tools, page redesigns, APIs, performance enhancements, bug fixes, and CMS integrations for a high traffic ecommerce site
- Drove business initiatives resulting in increased revenue, operational efficiency, and product reliability
- Initiated quality efforts around static types, language upgrades, end-to-end automated testing, and CI/CD
- Supported, mentored, coached, and fostered positive relationships among engineers across teams
- Defined, reviewed, and drove project proposals, tasks, design documents, processes, and code changes
- Technologies: Node.js, TypeScript, Vue.js, Kotlin, Python, Kubernetes, Sanity, Amplitude, Sumo logic

Senior Software Engineer | Full Stack   Marco Experiences   **NOV 2021 - JUN 2022**
- Automated customer and vendor onboarding processes (Airtable, Sanity, Retool)
- Developed & maintained web, payment, and permissions systems (TypeScript, React, Next.js, Auth0)

Software Engineer 2 | Full Stack   Microsoft (IC3)   **JUL 2020 - NOV 2021**
- IC3 powers video and related services for Teams, Skype, etc, serving hundreds of millions of users
- Operated, maintained, & automated data collection and ML training pipeline for background replacement
- Designed, implemented, and optimized a distributed seating algorithm for MS Teams video call attendees

Software Engineer 2 | Full Stack   Microsoft (Mixer)   **JAN 2018 - JUL 2020**
- Served tens of thousands of concurrent streamers and viewers and millions of monthly active users
- Worked on the video team hardening, scaling, and maintaining production services and infrastructure
- Co-developed patented adaptive bitrate system for FTL, our industry leading sub-second latency protocol
- Led the team through a culture change focused on quality and high reliability systems
  - Led service migration to a CI/CD model leveraging Azure DevOps and Docker containerization
  - Convinced management of the value of testing and fought to secure budget to support it
  - Led development of front-end test suite to verify video playback and quality across browsers and devices
  - Led development of end-to-end video streaming test suite that ran nightly and gated production releases
- Introduced an active network monitoring system deployed across 21 global data centers
- Optimized cloud storage for video uploads resulting in ~$3M in annual savings without cutting features
- Maintained and developed software in golang, C, C++, C#, Node.js, TypeScript, Bash, and Haskell

Software Engineer | Full Stack   Sunlight Payments   **JUL 2017 - DEC 2017**
- Employee #9 at a startup payments platform with a highly experienced, remote engineering team
- Maintained and developed features for AWS infrastructure, business logic, REST API, and web UI
- Used advanced Scala features including free monad based DSLs and generative property-based testing

Software Engineer | Full Stack   Electronic Arts   **SEP 2015 - JUN 2017**
- Led & coached small team in building a real-time dashboard for game client telemetry data
  - Developed CI/CD pipeline with Gitlab, automating deployment of front end resources to S3
  - Built system to ingest and summarize Kafka events and push live updates to dashboard over WebSockets
  - Built Node.js application to manage ingestion of events, preprocessing in SQS, and staging in S3
- Built a customer incident dashboard using Node.js microservices, Redis, React, D3, and JIRA REST APIs
- Built a dashboard remote and admin console app using Node.js, Cordova, WebSockets, S3, and EC2
- Built system to allow users to control content displayed on video wall dashboards from mobile clients
- Performed ad hoc data analysis and reporting tasks in R, plotting with ggplot2

Research Assistant | Full Stack Engineer   UCSD CALAB   **JUN 2013 - SEP 2013**
- Led development of user activity prediction app using GPS, gyroscope, accelerometer, and mic data
- Wrote Python server (numpy + mlpy) to extract feature vectors, train SVM, send predictions to iPhones

Engineer, Intern | Full Stack   General Atomics   **2012 - 2013**
- Worked with R&D team under clearance to develop flight planning and simulation tool in Java

Instructor, Volunteer   CALIT2   **2012 - 2013**
- Improved existing schematics; organized and led occasional guitar distortion pedal workshops

Sergeant (E5)   US Marine Corps   **2004 - 2009**
- Served as a radar technician and marksmanship instructor; taught, coached, supervised 1000+ Marines

Bachelor of Science   Electrical and Computer Engineering   UCSD   **MAR 2015**

Current as of 2024-07-27