

Jason Dixon

Software Engineer and Mathematician

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Experienced Senior Software Engineer with 14+ years of experience in the Streaming TV industry, specializing in Roku platform development and video delivery. Proven track record of delivering robust, highly scaled applications from concept through launch. Years of successfully leading remote-first, multinational, engineering teams. Pioneered interactive ads for streaming tv, building the BrightLine SDK which hundreds of millions of times daily.

WORK EXPERIENCE

The Walt Disney Company (ESPN / Venu)

Software Engineering Consultant • 08/2024 - 01/2025

- Mapped a highly unique codebase for faster comprehension by incoming developers, which helped to reduce the main onboarding pain point.
- Modeled large feature sets using profiling tools, uncovering the origins of subtle yet expensive performance issues.
- Developed and proposed multiple fixes for performance issues, directly addressing publishing criteria complaints.

Paramount Pictures (Paramount+)

Senior Software Engineer • 09/2022 - 01/2024

- Refactored existing code and patterns to improve performance and reduce hardware load, resulting in a more consistent and performant experience across the range of Roku devices.
- Integrated third-party tools and components into applications.
- Analyzed proposed technical solutions based on product team requests.
- Interpreted reports and corrected issues originating from testing tools, QA reports, and crash logs.

Endeavor Streaming

Manager of Client Applications • 05/2022 - 09/2022

- Managed multiple remote contracting teams to meet departmental software production goals (3 - 15 developers at any given time).
- Act as Roku platform SME in on-going white label project.

SKILLS

Languages:

- Java
- C/C++
- C#
- Python
- Javascript/TypeScript/Node.js
- Swift
- Rust
- Bash/Shell
- Flutter
- Brightscript/SceneGraph
- NumPy/PyTorch/SciPy/Tensorflow/Matplotlib
- Excel/VBA
- VBA/SQL

Databases:

- SQL
- GraphQL
- MongoDB
- Solr/Elasticsearch
- Cloud DB's (AWS)
- NoSQL
- Vector Databases

AI:

- Context Engineering
- Prompt Engineering
- RAG Search Systems
- AI Driven Development
- LLM API Integration
- Process Automation
- Chatbot Development
- Agents

- Review and assess architecture design, implementation, testing and deployment practices, to identify hidden technical debt and previously unmeasured performance costs incurred by previous designs, and present solutions to these issues.

FanDuel

Lead Software Engineer • 08/2020 - 05/2022

- Managed engineering team, delivering feature sets that continuously raised FanDuel's Roku and OTT products to their exacting quality expectations.
- Provided guidance and direction to less experienced staff in resolution of highly complex technical problems, while managing project scope, burndown rates, and engineering resources, to consistently meet deadlines.
- Created advanced UI features to display complex data sets related to sports wagering by user.
- Decreased application crash rates by over 530% to sub 1% crashes per session.
- Translated application storyboards, prototypes and requirements documents into functional applications.
- Created early cloud-native CI pipeline for Roku, leveraging Hulu's open-source brs library.
- Provided guidance and direction to non-technical staff in resolution of highly complex technical problems.
- Ported web and mobile FTP games to Roku.
- Wrote internal software to generate and modify FTP slot game mechanics/outcomes.

BrightLine LLC

Senior Software Engineer • 01/2018 - 08/2020

- Developed highly complex RSG component library which runs tens of millions times per day on multiple streaming providers.
- Created Brightline's Direct Injection SDK to allow channels to run interactive ads natively outside of RAF with permission from Roku.
- Optimized Brightline's interactive ad library in RAF, (about 20k lines of code - both SDK1 and RSG, confined to a single brs file).
- Led major refactoring efforts to introduce highly-efficient design patterns to reduce code complexity; ensure proper thread management; and simplify the integration process for channel developers.
- Led integration of direct injection SDK into complex channel environments and client video player constructions.

DVD Empire

Lead Software Developer • 11/2014 - 01/2018

- Developed and managed 14 unique OTT applications.
- Created white-label channel 'generator' which allowed non-Roku devs to manipulate a simple config file and create new private channels.

Tech:

- Git
- Jira
- AWS
- Azure
- CI/CD
- Charles Proxy

Video

- FFMPEG
- Nginx
- CDN / Caching Strategies
- WebRTC/RTMP
- Live Streaming / Live Scrubbing
- VOD-to-Live
- HLS/DASH
- Low Latency Strategies

General:

- Software Development Lifecycle
- Design Patterns
- Project Management
- Remote Team Leadership

EDUCATION

Arizona State University
Bachelor's in Software Engineering

Carnegie Mellon University
Mathematics Courses

Community College of Allegheny County
Associate of Science in Mathematics

- Improved loading times on legacy Roku applications by up to 300% by identifying platform-specific weaknesses and developing to these
- API modifications in C#, SQL and Apache SOLR.