

# DONATO E. BORRELLO

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## EXPERIENCE

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TECH LEAD VIDEO ADVERTISING  
GOOGLE

FEB 2018 - PRESENT  
NEW YORK, NY

- Designed a low-latency system for cross-screen ad serving on server-to-server ad requests. The system was fundamental to closing a deal which swung Disney from FreeWheel to Google Ad Manager.
- This same system is being extended as the back-bone of Googles next gen real-time-bidding platform (500k reqs/second) due to it's performance and handling of user-privacy.
- Championed and implemented a solution for bringing Google-signed-in personalization to Android for the first time using Google Play Services. This module is running on 1B+ Android devices.
- Oversaw implementation of GDPR, CCPA and COPPA compliance for digital video advertising, impacting 2B+ impressions/day.
- Design and lead global strategy for Ads Transparency for Connected TV devices including Android TV, Apple TV, Roku, FireTV and Chromecast.
- Tech Lead for Android Video Advertising SDK. Handles 400m+ impressions/day and earns 3x revenue per impression as display ads.

ENGINEERING MANAGER  
JW PLAYER

APRIL 2016 - JAN 2018  
NEW YORK, NY

- Interviewed, hired and built out the Data organization from 8 members to 30, as part of four independent teams.
- Successfully helped principal and senior engineers with career planning and coaching, through humility and asking questions.
- Worked closely with Product Management to plan quarterly and annual roadmaps for each team.
- Drove data architecture decisions when scaling data systems, from 15k req/sec to 60k req/sec.
- Perform technical comparisons and break-even analysis of technology stacks, then negotiated package pricing with cloud providers including AWS, Snowflake and ModeAnalytics.
- Revamped processes for Database Changes and Incident Response to 70 engineers across 8 teams; decreasing service outages from 0.15% to 0.01% weekly.

SENIOR SOFTWARE ENGINEER  
JW PLAYER

MAY 2014 - APRIL 2016  
NEW YORK, NY

- Redesigned the Javascript message bus for higher performance, shaving 20% off startup time, across 1 billion plays per month.
- Lead Engineer on implementing VPAID2 specification from the IAB, HLS standard from Apple, and Chromecast from Google.
- Prototyped and built a full-stack testing framework combining automated and manual tests. Regression testing decreased from 4 weeks to 1.5 weeks.

SOFTWARE ENGINEER  
FACTSET RESEARCH SYSTEMS

JUNE 2012 - APRIL 2014  
NEW YORK, NY

- Technical Lead on several web applications, setting the record for fastest rendering time among hundreds.
- Created a tool *p4-compare*, which let developers compare the cyclomatic complexity of their code changes against the baseline before committing it.
- Built out a toolkit for rapidly prototyping new reports, allowing teams in New York, Norwalk and London to search and share code as reusable modules.
- Learned to maintain, extend, and love legacy codebases. Or at least love refactoring them.

RESEARCH FELLOWSHIP WITH XEROX  
UNIVERSITY OF ROCHESTER HCI LAB

JUNE 2011 - MAY 2012  
ROCHESTER, NY

- Researched crowd-sourced real-time audio transcription for hearing-impaired internet users.
- Developed a management application for Amazon Mechanical Turk which allowed faster iteration on experiments.
- Awarded Xerox Fellowship for contributions to real-time processing of crowd inputs.

FULL STACK GAME DEVELOPER  
FREELANCE

JUNE 2008 - APRIL 2012  
NEW YORK, NY

- Created a new interface to a text-based MMORPG, to enhance and improve fundamental gameplay.
- Provided real-time analytics comparing 800+ registered users - at peak popularity 50k writes per day.
- Wrote bots to simulate human interaction, automating every aspect of gameplay. Required header-spoofing, captcha cracking, and basic NLP. (Dont tell the admins!)

## EDUCATION

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Bachelor of Science, Computer Science  
University of Rochester

May 2012  
Rochester, NY

## PUBLICATIONS

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### Real time Captioning by Non-Experts

October 2012

A white-paper on crowd-sourcing as an alternative to professional services for economically viable audio transcription. Nominated for best paper in the the 25th Annual UIST Conference.

### Online Sequence Alignment for Real-Time Audio Transcription by Non-Experts

November 2012

Research into aligning tokenized input from by multiple different users to determine the most likely correct sequencing. Published by the 26th Annual AAAI Conference 2012.

## OTHER CONTRIBUTIONS

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### Election Reform New York

February 2017 - Present

Founder of a non-profit group, partnered with FairVote, to bring Ranked Choice Voting to New York. On June 2019, it was passed in NYC for all municipal primaries and special elections!

### The Nitty Gritty of Adaptive Video Transmuxing

May 2016

A technical talk at the EmpireJS Conference on efficiently transmuxing video in javascript for improving time to first frame, with over 400 attendees.

## SKILLS

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- **Leadership:** Mentoring, Hiring, Performance Reviews, and Career Development
- **Programming Languages:** Java, Javascript, C++, Python, and SQL
- **Data Experience:** Spark, Storm, Kafka, Hadoop/MapReduce, Hive, and GraphX
- **Interests:** Music, Election Reform, Gardening, and Data Visualization
- **Favorite Places:** New York, Puglia, Turks'n Caicos, Tamarindo, and Buenos Aires