



Hector Gray

Leader + Engineer + Architect + Hacker
Los Angeles, California

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Who am I?

Senior software engineer & architect with 17 years of professional experience and a history of producing scalable solutions for complex problems. Responsibly handled the roles of Lead, Manager and Director. Provided leadership for 3 independent teams of up to 16 members. Early adopter always studying new frameworks, languages and technologies. Constant innovator, leader, learner and teacher.

Skills

C# LIVE STREAMING AAC AWS
HTTP RIAK Javascript C# MATERIAL DESIGN
SQL ES6 GOOGLE CLOUD WCF LINUX HLS
NOSQL NODE POLYMER GRUNT CDNs
REACT.JS HTTP SCRUM REST HTML5 MONGODB
WEB SERVICES FFMPEG H.264/H.265 TRAVIS CI

Accomplishments

Comedy Hack Day – Los Angeles

12/2014

Created BullyGo.at, this application analyzes the sentiment of comments from a users YouTube video collection providing emotional analytics to the creator and a deeper understanding of their impact. BullyGo.at also provided witty comebacks to any identified trolls using quotes from pop celebrities such as Taylor Swift, Kanye West & Miley Cyrus.

Comcast NBCU Hackathon - Los Angeles

11/2014

Winner – Today many people are not able to enjoy non-English content on television. In order to remove language as the barrier I built a Node & Polymer mobile application that can recognize what episode a user is watching and where they are in that episode. As the story progresses the app is updated in English with character details and plot twists as they happen on screen.

Hacking Healthcare: Creative Solutions to Medi-Cal's Problems

11/2014

1st Place – Created a Node & Polymer HTML5 application that test a patients Medi-Cal readiness, afterwards they are presented with either a printed Medi-Cal application form in their preferred language or a list of the next steps required to become eligible. The primary goal is to dramatically reduce the number of unnecessary applications in the backlog, which are currently over 350,000.



Web Developer
Windows Developer
Enterprise Applications Developer



Experience

Principal Architect @ Vixlet

1/2015-12/2016

- Built framework for quickly creating Node JS micro-services, this allowed for rapid development of new features and functionality and increased code consistency and maintainability.
- Led the API team during the migration from the original monolithic API towards a micro-service architecture and a successful launch of the new API.
- Developed a cached relational graph for aggregating counts and storing and querying relations between objects such as users and media. This quickly provided functionality for future products such as Likes and Subscriptions.
- Created an optimized system for handling static and personalized user activity feeds that allowed for faster propagation and delivery of data to users using RIAK, REDIS and SQS.

Principal Media Architect @ MySpace

8/2006-11/2014

- Created a media processing workflow engine first in .NET using WCF and Windows Workflow, then rebuilt in Node. This service handled hundreds of thousands of daily transcodes from users and partners and included the ability detect copyrighted material in user uploads and enforce any necessary DMCA rules, protecting Myspace from litigation.
- Built a broker system to balance uploads to the media processors. This helped upload servers to stream media to the most available media processor server. It greatly optimized the process and ensured users the least amount of wait time as possible. The broker was designed to be elastic and ensure a major partners 300Gb delivery would be processed without interfering with other partners or any other users. Other available servers would also be able to assist with the delivery.
- Created a live transcoding engine that transcoded high quality audio and video into the requested format in real time via a CDN. It delivered all varieties of HTML5 video and audio including encrypted HLS. Over time this saved millions in bandwidth costs, allowed for faster downloads, increased user engagement and gave the user the best experience possible.
- Developed a media ingestion engine that synchronized the rights, media and metadata from major music labels and picture studios. It allowed Myspace to quickly onboard new partners, and trust the content would consistently be ingested into the primary Myspace SQL databases.
- Created the engine initially used to ingest users synchronized Twitter and Facebook feeds for millions of Myspace users.

Software Developer @ Microsoft

6/2006-8/2006

- Identified and prevented security exploits from being introduced into the final release.
- Delivered features while working with product owners as a member of the SCRUM team to guarantee the software met requirements and was released on time.

Software Developer @ Servco

3/2006-6/2006

- Transitioned the warranty platform from a mainframe application to a C# ASP.NET solution. This cut the wait time of processing warranty repairs and waiting on parts and services by days.

**Software Developer @ HMSA**

8/2005-3/2006

- Built a robust .NET ETL service to handle 276/277 EDI medical claim transactions. This required a high attention to detail in order to deliver certifiable software within very tight deadlines. This gave customers faster and more reliable claim processing.

Founding Developer @ ICanHasCheezburger

2005-2006

- Created an online LOL builder, which helped transform the famous blog into a true social media application. This gave millions of readers the ability to create, caption, browse and share thousands of memes. After launching unique visitors grew 10x as the site became more viral and popularity spread.

Solutions Developer @ CTA [Security Clearance Obtained]

8/2001-8/2005

- Taught classes in .NET, Java, SQL, database design & programming methodology.
- Provided training and created mission critical applications for the members of the Air Force and US NAVY.
- Built a Windows mobile application for the U.S. Department of Veteran Affairs, which provides online health services to Veterans. This was presented before Congress and approved.

Software Developer @ Inovaware

8/2001-8/2005

- Created native C++ user interfaces for the enterprise software configuration system.
- Created C++ libraries for our clients used to securely submit billing data to our backend Java web services.

Software Developer @ Postcard Software

11/1999- 8/2001

- Developed the application used to display post cards in MFC and C++. This software was targeted to a Japanese audience and became very popular with hundreds of thousands of customers.