Alex Thomas











TECHNICAL SKILLS

Expertise – Full Stack Web Development, Infrastructure Design, Data Analytics, Framework Engineering, Android UI/UX, AI, ML Development Practices - Agile, Scrum, Continuous Integration/Deployment, DevOps, Data Pipelining/Mining, XFN Collaboration, DBMS Libraries - React, Node.js, Angular, GraphQL, Dataswarm, Hive, Postman, Google Cloud APIs, jQuery, AWS, REST, Jest, Git, Mercurial Languages - Javascript, Typescript, Python, Java, SQL, Hack, PHP, Kotlin(Android), C++, C#, C, Go

WORK EXPERIENCE

Meta (Facebook): CW from Sigma Connectivity Inc. - Full-Stack Web Developer II, Burlingame, CA

Jan 2021 - Present

- Launched "Dogfooding Hub" web product as part of Reality Labs (RL) Dev Tool Team in Q1 2024 utilizing React, GraphQL, and Hack
- Led the development of the program enrollment feature, creating an intuitive waitlist system with custom eligibility attributes
- Enhanced device redistribution by automating reassignment of under-tested devices, replacing a manual spreadsheet-based process
- Streamlined the dogfooding process and also increased program enrollment by 15% in 2024 alone
- Identified need for more granular data on Sandcastle job lifecycle to optimize the RL continuous integration system
 - Built MySQL and Python-scripted Dataswarm pipelines to recursively map and capture job dependency, queue, and execution time
 - Created "Perceived Queue Time" metric to identify gaps in CI idle time and was adopted Meta-wide following XFN collaboration
- Devised a solution for enabling continuous testing of 3rd party apps on Jest E2E framework, previously blocked by test time constraints
 - Developed a Device State feature in TypeScript, leveraging Android Snapshotting to cache and reuse device states after OOBE setup
 - o This solution cut test runtime by 70%, saving ~185 weekly lab hours, unlocking 3rd party app continuous testing under Jest E2E
- Led full-cycle development of QFIL feature within Maui Product using Node.js, Python, and PHP for efficient device recovery
 - o Streamlined firmware restoration with Qualcomm/Android APIs, significantly reducing latency and enhancing developer efficiency
 - o Initially designed for the Oculus universe, QFIL is now supported for all Meta devices and has aided in device recovery ~10K times
- Spearheaded Android/Kotlin development for Portal Device Accessibility, addressing critical need for ADA compliance
 - Specialized in this underserved area by leading specific functionality improvements within Calling's Talkback feature
 - Enhanced accessibility for 4 production models by Q1 2021's branch cut, laying groundwork for further Android Accessibility API work

Proterra - Frontend Web Developer, Burlingame, CA

Nov 2020 - Dec 2020

• Deployed a jQuery-based component in the APEX 2020 portal to standardize product information using generated tooltips

Knowles Intelligent Audio - Engineering Intern, Mountain View, CA

Jun 2019 - Sep 2019

Optimized Audio Parser with speedup of 1.3x to then use in Chelsea Board Virtual Training with Data Collection over 2700 files

Camp Galileo - STEM Camp Counselor, Fremont, CA

Jun 2018 - Aug 2018

• Taught and lead group of 30 kids (8-12) in STEM activities, building their engineering foundations for the future

PROJECTS

Dream Team Transfers - React, Python, PouchDB

Oct 2023 - Feb 2024

- Engineered a website for users to engage in a Soccer Transfer Window, facilitating the buying and selling of up to 5023 players
- Leveraged real-world player data to create an immersive marketplace, allowing users to easily select their lineup and build their squad

Twitter Search Engine – Angular, Spring, Node.js, Lucene, Twitter Dev API, Twitter 4j

Apr 2021 – Jun 2021

- Designed a search engine capable of efficiently searching across ~9 million tweets addressing challenge of large-scale data handling
- Integrated Lucene index on data crawled by Twitter 4j to enhance search efficiency and accuracy, embedding results on Angular frontend

User Engagement Map - React, Node.js, MongoDB, Postman, Google Cloud APIs

Jul 2020 - Sep 2020

- Developed a web application capturing real time user engagement and plotting it using Google Cloud API for a wearable product
- Implemented secure user registration and data transmission, utilizing encryption and MongoDB for enhanced data safety

The Chai Chai Talk – UCR Honors Capstone Research Project Submission

Jan 2018 - Jun 2020

Managed end-to-end podcast series of interviews exploring the intersection of music and identity for Immigrant Americans

Box Bot: UCR Citrus Hack Submission - Arduino IDE, Bluetooth Controls, C#

Nov 2017

• Best Hardware Hack Award for motorized car controlled by a Bluetooth Android App and programmed on Arduino IDE

EDUCATION

B.S. in Computer Science - University of California, Riverside, CA

Aug 2016 - Jun 2020

3.76 GPA | Cum Laude | Chancellor's Honor List | 2x University Honors Excellence Scholarship | GBP Academic Scholarship