# Stephen Luc

stephen-luc

### Skills

Languages: Python, Erlang, Java, JavaScript, C++, SQL

Technologies: ReactJS, React Native, Relay, Django, AOSP, GraphQL

## Experience \_\_\_\_

#### Meta (formerly Facebook)

Menlo Park, CA

SOFTWARE ENGINEER, WHATSAPP CALLING INFRASTRUCTURE

July 2021 - Jan 2023

- Built WhatsApp call links which creates reusable links to start group calls in WhatsApp with 400K+ daily active users
- Led the effort to detect and terminate calls that were seen as ongoing but have no connected participants
  - Created a database crawler in Erlang that processes millions of records per day
  - Reduced user complaint tickets by 90% which improves users' experience
- Led the development across 4 teams to enable administrative controls in group calls to prevent bad actors from negatively influencing a call
  - Designed and developed APIs in Erlang for client facing teams to set call admins and for those admins to be able to remove unwanted participants from the call

#### SOFTWARE ENGINEER, XROS DEV SERVICES

July 2019 - June 2021

- Led the development across 3 teams to allow Oculus VR headsets to download and play AAA games (60GB+)
  - Reduced all apps' install memory footprint by 50% by redesigning the App Installer Java service to download and install individual chunks of the app at a time
    - Enabled apps to be playable at least 20% faster by prioritizing required assets first then asynchronously downloading optional assets/content seen later in playthrough after
- Reduced the OS Updater service memory footprint in Oculus headsets by 98%
  - Enabled more play time in Oculus by removing the blocking function call to update the OS and removing the persistent cache for the update
- Designed and built a microservice in C++ to log telemetry for all system services on Meta wearable devices which is used for data analytics and developer debugging

#### SOFTWARE ENGINEER INTERN, INTERNAL TOOLS

Jan 2018 - Apr 2018

- Designed and built a high level project overview as part of the internal tasks tool, which is used by all 70,000+ employees within the company
  - $\dot{-}$  Designed and built a dashboarding tool to track the progress of projects by showing the tasks completed and their completion rate which is used in 5000+ projects in the company
  - Designed and built with ReactJS and React Native to bring the dashboard to multiple platforms which increased productivity of all employees by 40%

Zanbato Mountain View, CA

DATA ENGINEER INTERN

May 2017 - Sept 2017

- Created a Python web crawler to extract financial business data and investment allocations of over 500 institutions saving 250+ hours of manual scraping
- Analyzed all the institutions' investment allocation trends leading to 25 institutions being recommended to the business and operations team, resulting in an increase to the number of institutions using the platform by 70%
- Built several stock charts and comparison charts which allows investors to more easily follow the state of private market investments

**BrainVision** Toronto, ON MOBILE DEVELOPER INTERN Feb 2016 - Aug 2016

· Led the development to improve users' experience in discovering new and existing products and stores

 $-\,$  Created the search and sort feature which allows users to find products within a close proximity 75% faster

## Education \_

**University of Toronto** 2019

HBSc. Computer Science, Software Engineering Specialist