# MOHAMMED SAHL

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## SUMMARY

· Experience with gRPC, Android development, Salesforce, full-stack frameworks, scripting and compilers
· Python, Go, Kotlin, Java, JavaScript, TypeScript, C/C++; React/Redux, Sails/ExpressJS, Cypress

## EXPERIENCE

**Software Developer** *(Remote) Waterloo, ON*
*Google* January 2022 - April 2022

· Designed and implemented an internal service used by Anthos teams to coordinate releases.

· Reduced Anthos release planning by **10+ days** by automating dependency logistics between teams

**Android Developer** *(Remote) Waterloo, ON*
*Wonolo* September 2021 - December 2021

· Reduced tax form request times by **3 hours** by adding a self-service screen using Jetpack Compose

· Improved team agility and mitigated technical debt by adding Moshi parsing to core app models

· Increased percentage of crash-free users by **0.5%** over several app releases by diagnosing & fixing **20+** bugs

**Salesforce Developer** *(Remote) Waterloo, ON*
*Manulife* January 2021 - April 2021

· Revamped dataflow pipeline with Apache Nifi increasing reliability in data transfer from SFTP to Salesforce

· Programmed Apex Batch classes and Triggers to process **20,000+** records across several campaigns

· Dropped application load times by **57%** by converting to a stateful architecture for event propagation

**Software Engineering Fellow** *(Remote) Waterloo, ON*
*Major League Hacking* May 2020 - August 2020

· Built a RESTful back-end server and testing framework for **v2** of a JavaScript transpiler sandbox

· Developed a word processing document parser and contributed to a spreadsheet data toolkit

· Added E2E tests using Cypress helping validate UI and server requests for a documentation generator plugin

**Quality Engineer** *Toronto, ON*
*WorkMarket* May 2019 - August 2019

· Expedited build and release pipeline by **25x** by automating repetitive test cases using Espresso

· Developed software test plans for the Android platform increasing case coverage by **30%**

· Reduced employee on-boarding times by **4x** by consolidating documentation into a single repository

## PROJECTS

**Babel-Repl** | *JavaScript, React, SailsJS, Supertest*

· Engineered a sandbox that transpiles code from ES6 to ES5 syntax with custom plugin and config support

· Introduced functionality to save and fork blobs, view AST with syntax highlighting and transpile history

· Implemented back-end and testing infra using SailsJS's MVC framework

**C-Compiler** | *C++, Assembly, Bash*

· Created a compiler that scans, parses and generates executable files from C source code

· Implemented loops, variable assignment, function definitions, conditional, arithmetic and return statements

· Uses LR(1) NFA parsing to analyse a context-free language and produce derivation for a given string

**WordJS** | *TypeScript, PowerShell*

· Architected a word processing document library with **1.2k+** stars, **200+** forks and **402k+** weekly downloads

· Implemented logarithmic time file type detection by using trie data structure to process file signatures

· Developed a file-type agnostic XML handler to parse through text blocks for unzipped files

**Auto-Repo-Struct** | *React, TypeScript, TSX*

· Authored a plugin to allow users to visualize, in tree form, repository structures on Github

## EDUCATION

**University of Waterloo** *Waterloo, ON*
*Bachelor in Computer Science (Co-op)* September 2018 - April 2023