

ARUNESH MISHRA

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SUMMARY

Hands-on engineering leader with strong background in Agentic AI, Algorithms and Distributed Systems. Looking for a leadership role in a challenging and high impact domain.

EXPERIENCE

Co-founder and Chief Technology Officer

June 2019 – Present

Piccolo Labs

Mountain View, CA

- Developed a REST API using FastAPI and PostgreSQL to store data from learning management systems
- Developed a full-stack web application using Flask, React, PostgreSQL and Docker to analyze GitHub data
- Explored ways to visualize GitHub collaboration in a classroom setting

Co-founder and CTO

2017 – 2019

Incept AI

San Mateo, CA

- Chat-based AI assistant on Android to automatically take actions on the user's behalf
- Engineered a knowledge base for the AI assistant consisting of mobile app screens, action traces and user intents
- Launched and grew the app to a total of 100K+ users

Tech Lead, Senior Software Engineer

Jan 2013 – Feb 2017

Google Inc

Mountain View, CA

- Launched a network stack for peer-peer gaming on iOS and Android via Google Play Games SDK. Designed and implemented the network stack that maintains performance under changing network conditions and NAT topologies. Worked with the CEO of VectorUnit for RipTide demo at Google I/O to showcase the platform.
- Launched an API called Google Nearby that can transmit small amount of data securely over near-ultrasound for mobile phones. This can be used to authenticate people in same physical room and securely measure physical distance between phones to under 1 inch accuracy. Responsible for the stack on iOS and Android. Google Nearby grew from inception to 500M daily users.
- Formed a team under Marissa Mayer to build an Android app that can automatically determine if two people are in the same physical room.

Software Engineer, L4

2008 – 2013

Google Inc

Mountain View, CA

- Launched Wifi-based location services for 3+ Billion users on Android and Chrome from inception. Build Wifi-RF based location clustering algorithms, traffic prediction and business occupancy prediction algorithms.
- Designed and implemented a distributed system to compute user location using Wifi and Cellular base stations. System self-learns from Android users with a GPS fix to push location to indoor-users using statistical and randomized signal propagation algorithms.
- Built cellular remap detection and localization technology, which powers Google's Mobile Maps software (1B+ downloads, most popular app on mobile).
- System is now used on Android, WinMo and Blackberry phones. Also works on browsers using HTML 5 Geolocation API, such as on Mozilla's Firefox and Chrome browser, also launched with Google's Toolbar for Microsoft's Internet Explorer.
- Algorithms serves over 3 Billion location computations per day on Android and powers Google's mobile Ads business unit. The success of the Wifi project helped grow the team to 70 Engineers (from 3).

PROJECTS

Gitlytics | *Python, Flask, React, PostgreSQL, Docker*

June 2020 – Present

- Developed a full-stack web application using with Flask serving a REST API with React as the frontend
- Implemented GitHub OAuth to get data from user's repositories
- Visualized GitHub data to show collaboration
- Used Celery and Redis for asynchronous tasks

Simple Paintball | *Spigot API, Java, Maven, TravisCI, Git*

May 2018 – May 2020

- Developed a Minecraft server plugin to entertain kids during free time for a previous job
- Published plugin to websites gaining 2K+ downloads and an average 4.5/5-star review
- Implemented continuous delivery using TravisCI to build the plugin upon new a release
- Collaborated with Minecraft server administrators to suggest features and get feedback about the plugin

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS, R

Frameworks: React, Node.js, Flask, JUnit, WordPress, Material-UI, FastAPI

Developer Tools: Git, Docker, TravisCI, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

Libraries: pandas, NumPy, Matplotlib

EDUCATION

Southwestern University
Bachelor of Arts in Computer Science, Minor in Business

Blinn College
Associate's in Liberal Arts

Georgetown, TX
Aug. 2018 – May 2021

Bryan, TX
Aug. 2014 – May 2018