# Pratyush More

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### **EDUCATION**

#### YALE-NUS COLLEGE

BS IN MATHEMATICAL, COMPUTATIONAL, & STATISTICAL SCIENCES (Magna Cum Laude) (3% acceptance rate) Grad. May 2018 | Singapore Cum. GPA: 4.78 / 5.00 Major GPA: 5.00 / 5.00

# MASSACHUSETTS INSTITUTE OF TECHNOLOGY

VISITING UNDERGRADUATE: COMPUTER SCIENCE Feb - May 2017 | Boston, MA, USA GPA: 4.80 / 5.00

## COURSEWORK

Integrated Science 2: Computer Science (Intro to CS via Functional Programming; Peer Tutor) **Fundamentals of Programming** Advanced Algorithms & Data Structures Software Engineering Computer Vision Machine Learning (Peer Tutor) Network & Computer Security Multicore Programming Logic in Computer Science Programming Language Design Quantitative Reasoning Statistical Programming Statistical Computing Entrepreneurship Lab Early Stage Private Equity Investing

# SKILLS

#### **PROGRAMMING**

Over 10000 lines:
Java • Go • Python • C
Over 3000 lines:
C++ • OCaml • R
Over 1000 lines:
Shell • Javascript • CSS
SQL • HTML

#### OTHER EXPERTISE

Mentoring & Leadership
Tensorflow • gRPC
Microservices • Protobufs
Android Platform • Open-Source
Software

#### **EXPERIENCE**

#### **GOOGLE** | SOFTWARE ENGINEER/TECH LEAD

Oct 2019 - Present | London, UK | Munich, Germany

Android Open Source Project (AOSP)

- Delivered Android OS support for per-app languages, a major Android feature. Was demoed at Google I/O, covered by 20+ publications (e.g. <u>Android Police</u>), and integrated by major apps (e.g. Google Maps, LinkedIn, Zomato).
- Led a cross-continental team of 4 engineers, and influenced a total of 10, to build a platform feature going out to XB+ devices.
- Drove alignmentwith 10+ cross-functional stakeholders/leaders from engineering, product, and UX.
- Worked across **7** systems, addressing public API & permission design, integrating open-source & proprietary systems, concurrency & lock contention, and dynamic APK splits. Mostly in Java.
- Gave a talk at Droidcon London 2022 on multilingualism in Android.

#### Google Identity

- Built next-gen Identity APIs to access semantic views on Google accounts. Used by most major Google products including Search, Maps & YouTube.
- Developed distributed systems handling **XXM+ QPS**, working in Java, C++.
- Designed & deployed a real-time notification system for account changes.
- Enabled **500+ Google-wide clients** to define custom views on accounts via a build-time code-generator.

#### **GRAB** | SOFTWARE ENGINEER, RECOMMENDATION

Jul 2018 - Sept 2019 | Singapore

Grab is South East Asia's largest ride-hailing platform with **over 100 million** users.

- Created an A/B testable distributed ML recommender system to personalise Grab's homepage content. Latency less than 50ms; mostly in Golang.
- Built a **real-time data pipeline** to incorporate user interactions on Grab's app. Feedback loop of **less than 10 seconds**.
- Optimized and productionized a collaborative filtering ML model to use **75%** less memory through quantization and sparse indexing.

#### **QUANTCAST** | SOFTWARE ENGINEERING INTERN

May 2017 - Aug 2017 | May 2016 - Jul 2016 | Singapore

- Designed & implemented an extensible, multithreaded notification service.
- Increased fault-tolerance through database persistence and a delayed retry.
- Reduced latency of thirdparty advertisement processing by more than 20%, through HTTP batching and a time-based cache system.

## RESEARCH

# FLOW BASED GENERATION OF DENSITY-EQUALISING MAPS | RESEARCHER

Feb 2016 - Oct 2018 | Singapore

- Co-authored a paper on a novel algorithm producing density-equalising maps.
- Improved on state-of-the-art techniques by being **60 times faster**.
- Published in PNAS: the second-most cited journal in the world. View paper: doi.org/10.1073/pnas.1712674115.
- Open-sourced the software: github.com/Flow-Based-Cartograms/go\_cart.