ROHAN PRITCHARD

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Citadel Software Engineer and First-Class Computing graduate from Imperial College London, ex-Meta Senior Software Engineer. Enjoys bringing clarity and energy to cross-functional projects.

🎓 EDUCATION

Imperial College London   *2016-2020*
Computing MEng   ***First Class Honours***

</> TECHNICAL COMPETENCIES

Industrial experience with **Python**, **Hack**, **Java**, **Haskell**, **C++**, **SQL**, **Kubernetes**, **Google Cloud**, **Docker**, **Kafka**. University experience with **AWS**, **Swift**, **React**. Some personal experience with **Go**. Generally language agnostic and always enthusiastic to work with new technologies.

💼 INDUSTRIAL EXPERIENCE

[Citadel] **Treasury Execution**   *H1/2023 - Present*

· Working in partnership with Portfolio Financing traders and operations to build an entirely new suite of systems to replace legacy infrastructure across repos trading, securities lending, locates, and self-clear optimisation using a modern tech stack (Java, Python, Kubernetes, Docker, Kafka). Supporting both the asset-management (hedge-fund) arm as well as Citadel Securities (HFT).

· Fully automated Citadel's triparty overnight funding processes through building a new distributed system, saving 5-10 hours of operations/trader manual work per week, reducing operational risk, and supporting new financing mechanisms.

· Rebuilt manual lifecyle management processes of our financing products and built new STP mechanisms to capture vendor lifecycle update events.

[Meta] **Misrepresentation Problems - Central Integrity**   *H2/2021 - H1-2023*

· Inherited Underage enforcement across family of apps as an at-risk problem with undocumented legacy infra, unclear ownership and poor/no monitoring. **Became area expert within 2 months** and consolidated and documented infra.

· De-risked problem space by identifying and mitigating three major flaws (and numerous minor ones) - lead investigations of flaws through integrity wide review and proposed and shipped long term solutions. Shipped logging, metrics and alerting. Problem space is now considered mature and has been transferred to a seperate team for maintenance.

· **Doubled our Underage enforcement rate of Instagram accounts** with no increase in manual review demand through improvements in our automated account review process and work on actor-centric enforcement (propagating enforcement across family of apps).

· **Increased good-pass Instagram appeal rate by 60%** (this prevents false-positive accounts from being permanently disabled and deleted) by proposing and coordinating a cross-functional effort to build a cross-platform native appeals flow. This work also paves the way for integration of new appeal methods, unblocks regulatory reporting (a company priority) and centralises Instagram enforcement and disable ownership (vastly improving code reuse and engineer efficiency).

· Designed, project managed and built our Underage detection/enforcement efforts on new Meta accounts (replacement for Oculus) - a large company priority which blocked the launch of Meta accounts. Coordinated with legal, privacy, product and policy as well as several engineering teams to build solution.

· Co-designed Meta Verified impersonation checks flow and API, a critical blocker for Meta Verified launch - asked to support launch of Meta Verified in the US for several weeks.

- Worked on Impersonation problems across family of apps (protecting high-profile individuals, businesses and private individuals from abusive account impersonation). **Saved 20% of maual review capacity** by shipping classifier automations. **Increased resiliency in infrastructure** by identifying two major infrastructure flaws, leading incident reviews and cleanups for both, and shipping several large follow-up improvements.
- Pushed for and extended various integrity platforms to support Meta accounts - functionality is now being used by several other integrity teams and has increased code reuse and system reliability.
- Mentored 3 new engineers through ramp-up and team selection, assisted in hiring in one junior and one senior engineer - personal mentor to both through ramp-up on our own team (including planning of individual roadmaps).
- Privacy champion for wider sub-pillar - coordinating work on privacy improvements to meet regulation and user commitments.

[Meta] **Authenticity Growth - Central Integrity** *H2/2020 - H1/2021*

- Owned a series of rapid-prototyping experiments to identify the correlation between user authenticity and recidivism (tendency of a violating user to re-offend). Built a selfie smart-capture flow to verify the identity of offending users and demonstrated a statistically significant drop in rate of recidivism for users who passed this flow. This provided the basis (both in the technical implementation and the published research) for work fighting the distribution of child exploitation imagery by the Child Safety team.
- Maintained a product enforcing location and identity verification of high reaching page admins originally built to protect US-2020 elections. Worked from enrolment criteria (e.g. **data pipelines and signal processing**) through to front-end components to take user through verification challenges (e.g. ID verification).

[Meta] **Software Engineering Intern** *6 Months - Summer 2019*

- Migrated critical parts of the Ads Ranking bidding/actioning library (implemented in **C++ and Python**) to new unified-decision-tree infra that allows quick and safe changes with near immediate push to production.
- Worked on Facebook's Community Integrity team as a Machine Learning Engineer developing on Facebook's open source **Natural Language Processing** framework, **PyText**, in order to build more accurate models and more extensible frameworks. Worked primarily with **Python** and **Haskell**, and some **Hack**.

[Morgan Stanley] **Summer Technology Analyst** *10 Weeks - Summer 2018*

- Designed, developed and integrated a **continuous deployment** pipeline into AxiomSL (a financial regulatory tool) combining version control and Jira Project Tracking software to promote **agile development** and rapidly decrease deployment time. Being trialled in London to great success, expected to roll out globally. **Reduces deployment time from 1 day of manual work to a 30 min automation.**

⬡ PROJECTS

LexiTrack - Biolinguistic Data Collection Service *Java, Python, AWS, Docker, PyText* - 2020

- Designed and built a scalable, privacy sensitive data collection and processing service which is now being used by C3NL (an Imperial College research group) to track the biolinguistic changes in written communication of dementia, minor stroke, and 'long COVID' sufferers. System includes an intuitive Android application for patients to sign into sources of written communication and track their progress, and an extendable cloud service which executes a number of NLP tasks for data collection towards Imperial College research.

Real Time Footfall Analysis *Golang, Python, Swift, React, AWS, Docker* - October 2018

- Built a real-time, scalable footfall analysis platform for tracking attendees' behaviour at large events and producing rich data analytics from this. Also built a complex parallel simulation model to aid feature driven development and stress testing. Attained over 90%.
  🏆 Palantir Most Outstanding Third Year Project for Software Engineering Excellence prize.