

Misrab M. Faizullah-Khan

misrab.me

EDUCATION

2008-2013 **STANFORD UNIVERSITY**

M.S. Management Science & Engineering: Artificial Intelligence

B.A. Economics, Minor Computer Science

2004-2006 **UNITED WORLD COLLEGE OF SOUTH EAST ASIA**

International Baccalaureate (IB) Diploma

- Total score: 44/45

- Extra subject: Further Mathematics

- National Youth Achievement Award, Economist of the Year, Journalist of the Year

COURSEWORK & LEARNING

Technical Machine Learning, Databases, Convex Optimisation, Computer Networking, Cryptocurrency & Blockchain

Operations Technology Strategy, Accounting, Operations Research

Projects Neural network that identified spoken languages; Youtube channel ranking system; Online auction mechanism design and more

SKILLS

Programming Proficient in C, Rust, Java, Golang, Python, Javascript

Mobile/Web HTML, CSS, Node, d3, React, common frameworks

Databases Hands-on experience with SQL, MongoDB, Hadoop, Hive, graph databases and distributed systems fundamentals

Languages Written and spoken English, French (native), Mandarin, Urdu, Hindi, Italian (advanced), Turkish, Portuguese, Indonesian (intermediate)

Interests Classical and jazz guitar, piano, long-distance running, garage engineering, modern history

WORK

- Dec '16–present **TECH PIONEERING**, *VP of Data Science*, GO-JEK, Singapore
- Go-jek is Indonesia's first tech unicorn (going decacorn). Uber for motorcycles, and so much more. As of November '17, we had 600k drivers, 100k merchants, and were doing millions of orders on our platform every day
 - I help facilitate a rapidly growing team of almost thirty data scientists and engineers, across three countries
 - Projects include surge pricing, smart allocation, anomaly detection, recommendation systems and more
- Jul '16–Dec '16 **BLOCKCHAIN**, *Cohort Member*, ENTREPRENEUR FIRST, Singapore
- Intensive entrepreneurial bootcamp. Learnt a ton about customer validation, product iteration, rapid development. Also had loads of fun
- Jan '16–Jan '17 **DATA SCIENCE TEACHING**, *Data Science Instructor*, GENERAL ASSEMBLY, Singapore
- Taught part-time data science to dozens of brilliant adult professionals alongside two teaching assistants
 - Official Net Promoter Score of 90 (Beyond "Excellent")
 - Topics included: K-Nearest Neighbours, Naïve Bayes, Regularisation, Logistic Regression, K-Means Clustering, Ensemble Techniques, Decision Trees and Random Forests, SVMs, Dimensionality Reduction, Recommendation Systems, Database Technologies, Network Analysis
- May '15–May '16 **CLIENT & BIG DATA**, *Senior Optimisation Specialist & Data Scientist*, TRIPADVISOR, Singapore
- Key role in designing and developing an algorithm from scratch that made more than 5 million auction bids a day, accounting for approx. US\$50 million of revenue a year
 - Highly technical client-facing role. Worked in small distributed team on some of the toughest data and auction related challenges at TripAdvisor
 - Optimised clients' bidding strategies on the advertising auction. Designed, implemented and maintained scalable big data infrastructure
- April '15 **PROJECT CONTRACT**, *Data Engineer*, NUGIT, Singapore
- Built an NLP agent on Slack that could respond to plain-English user queries, interactively. "Nugbot" would parse natural language, issue complex asynchronous API requests, and respond appropriately
- Jun–Sep '14 **BIG DATA**, *Data Scientist*, VISA LABS, Singapore
- Helped maintain a pipeline of prototypes leveraging emerging technologies. Hands-on experience with major big data tools ranging from Spark to d3.js visualisation
 - Worked in a team of almost exclusively PhDs, from whom I learnt tremendous amounts
 - Planned and ran daily analytics on terabytes of data
- Sep–Mar '14 **CONVEX OPTIMISATION**, *Programmer*, STANFORD ENGINEERING
- Had the honour of working under Prof. Stephen Boyd, contributing to the development of a python version of the 'cvx' convex optimisation library

- Aug–Nov '13 **ENTREPRENEURSHIP**, *Co-Creator*, NEUROSPLASH
- Hand-wrote 30k+ lines of Node.js running on top of MongoDB and SQL for an online educational platform. Worked in amazing team of four
- Sep–Dec '12 **TEACHING**, *Teaching Assistant*, STANFORD AARC CENTRE
- Tutored student athletes on intermediate game theory and microeconomics
- Jul–Aug '12 **FINANCIAL MODELLING**, *Data Analyst*, GOV. OF SINGAPORE INVESTMENT CORP (GIC)
- Constructed software financial models for the Australian real-estate market
- Jul–Aug '10 **MANAGEMENT**, *Apprentice*, SHAH AND TANAH GROUP, Mumbai India
- Rotated through Sales, Accounting and Operations departments of a Mumbai-based industrial infrastructure provider
 - Produced capstone project with recommendation for improving the effectiveness of each department. Enhanced cash flow by 16%
- 2006–2008 **MILITARY SERVICE**, *Frontline Officer*, SINGAPORE POLICE FORCE
- Operated in high-stress environments including domestic violence, disputes and emergency incidents
 - Presented the Outstanding Contribution Award for excellent service
- Jul–Aug '06 **ACCOUNTING**, *Accounts Auditor*, ROBERT YAM AND CO, Singapore
- Audited clients' accounts by verifying reported figures against financial statements. Gained familiarity with technical commercial documents
- Jun–Jul '06 **PRIVATE EQUITY**, *Research Assistant*, PORTELET ASIA, Singapore
- Independently produced a research paper on the water purification industry in Asia

LEADERSHIP ROLES & ACTIVITIES

- 2009–2011 **SOCIAL ENTREPRENEURSHIP**, *Founder*, SC-ASIAN FORUM FOR EDUCATION
- Spearheaded a student-run organisation that promotes learning about education policy. 20 active members plus quarterly conferences of more than 100 people
- 2008–2011 **TRADING**, *Director*, BLYTH FUND
- Lead a US\$140k+ fund at Stanford University. Routinely assessed investment opportunities and executed trades
- 2006–2008 **COMPETITIVE SPORT**, *National Player*, SINGAPORE POLO TEAM
- Our team achieved the Silver Medal at the 24th South East Asian (SEA) Games
- 2004–2006 **JOURNALISM**, *Editor in Chief*, MONEY MATTERS MAGAZINE
- Produced first profitable issue of school Economics magazine ever. Circulation of 2000+ individuals
- 2004–2006 **VOLUNTEER WORK**, *Chairman*, JAKARTA STREET KIDS
- Managed and organised 50+ volunteers in raising awareness and funds for two schools and one orphanage in Jakarta
 - Identified transparency as key barrier to donations, addressed this issue through detailing money paths