

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

Independent Topology (*Essential Topology*), Quantum Computation (*Vazirani, UC Berkeley*), Statistical Learning Theory (*Hastie, Tibshirani, Stanford*), Cell Biology and Genetics (including time in Imperial College's Postgraduate course)

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

SKILLS

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

Mobile/Web HTML, CSS, Rails, Node, Angular, d3, Meteor, React

Databases Hands-on experience with SQL, MongoDB, Hadoop, Hive, TitanDB

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

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

WORK

- May '16–present **BLOCKCHAIN**, STEALTH PROJECT, Singapore
- Developing the future through Blockchain
- 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
- Jan–Apr '16 **DATA SCIENCE TEACHING**, *Data Science Instructor*, GENERAL ASSEMBLY, Singapore
- Taught a part-time data science course to about a dozen adult professionals alongside a Teaching Assistant
 - 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
- 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