# **Ishan Anand**

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## Work Experience

## Career break / Technical consulting

2021-Present

- Uptrain AI, YC W23: Tooling to monitor ML models' performance. Wrote the open source library and managed deployments for early customers.
- Silverleaf Capital: Wrote low latency code for cross exchange commodities arbitrage persist market feeds, place exchange orders, track risk and deployment of high turnover strategies.

#### Silverleaf Services, Mumbai

2018-2020

Software/Data engineer

- Worked with external clients on their data stack, primarily a K-12 edtech company.
- Adaptive learning API: Implemented a question recommendation system to guide student activity as they practiced exercises on the platform. Trained collaborative filtering models on prior student interactions, wrote data pipelines, set up A/B tests over ML models and suggestion heuristics. The system served >1mm requests a day and twice led to double digit jumps in student learning metrics and platform retention.
- Doubts over Chat: Set up a search backend and small web tools to help match student questions (text/image) to
  existing content base with tutors as fallback. Served 100k requests per day on average using a combination of OCR
  APIs, Elasticsearch filters and sentence embeddings while iterating with Learning to rank models. Significantly
  reduced tutor usage and session durations, while improving tutor ratings.
- Sales analytics: Worked with the business team on improving revenue from homesales agents. Analyzed performances through the conversion funnel, retention among agent cohorts and impact of pricing/incentive changes.

#### JP Morgan & Chase, Mumbai

2017-2018

Analyst, Quantitative Research - Equity Derivatives group

- Pricing models: Extended an existing pricer to accommodate a bespoke equity-rate hybrid payoff.

#### Goldman Sachs, Bangalore

2015-2017

Senior Analyst, Derivatives Analysis group

- Pricing models: Analyzed and validated models used by the Securities division for credit derivatives (risky bonds, default swaps, correlation products).
- Regulatory: Computed and reported the price impact of model limitations for the credit derivatives portfolio in usual and stressed scenarios. This is a component of the group's periodic submission to the Fed.
- Market risk: Vetted models used to generate and apply shocks to credit risk factors for daily VaR computation.
   Carried out backtesting, statistical tests and set up alternate models to benchmark impact.

### Education

### Indian Institute of Technology, Mumbai

Mumbai, India

Electrical Engineering with Hons., B. Tech 8.74 GPA

2011-2015

Research: Devising controllability metrics for large networks. Didn't finish with substantial output.

Coursework: Systems and Control eng (Minor, 9.8 GPA), Linear Algebra, Network flow models, Filtering theory

# **Programming toolset**

**Languages** Primarily Python. Can write Go/Javascript with a manual.

Wrote latency-sensitive code in Dlang/C. I'd love to be a polyglot.

**Databases** Postgres for large homogenous data, Elasticsearch for documents.

Stick to Sqlite/DuckDb when I can and use Redis if we need a caching layer.

**Deployment** Python web API libraries, Docker, Terraform and regular AWS tooling.