# Kunaal Ahuja

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#### **FDUCATION**

## GEORGIA INSTITUTE OF TECHNOLOGY

MASTER OF SCIENCE IN ANALYTICS Computational Data Analytics Expected Dec 2020 | Atlanta, Georgia

#### NETAJI SUBHAS INSTITUTE OF TECHNOLOGY (NSIT), DELHI UNIVERSITY

BE IN INFORMATION TECHNOLOGY May 2014 | New Delhi, India CGPA: 9.0 / 10.0 Rank 2 in the department

#### COURSEWORK

#### **GRADUATE**

Analytics Modeling
Data and Visual Analytics
Deterministic Optimization
Operation Research
Regression Analysis
(Teaching Assistant)
CSE 6040 Computing for Data Analytics

#### **UNDERGRADUATE**

Machine Learning

Pattern Recognition Algorithms
Data Structures
Operating Systems
Relational Database Managements
Systems
System Analysis And Design
Computer Graphics
Computer System Architecture

### SKILLS

#### **ANALYTICAL SKILLS**

ANALYTICS AND LANGUAGES: Python and R for data analysis and machine learning • C++ • Slang • Scala Javascript • Matlab • D3 • ETFX

DATABASES and SOFTWARES: SQL (Sybase, MemSQL, MySQL) • AWS S3 • Hive • Excel • Xpress • Tableau

TOOLS/FRAMEWORKS: Hadoop • Spark • Pig • HBase • MapReduce • D3.js

#### FINANCIAL CERTIFICATIONS

Cleared CFA (Chartered Financial Analyst) Level 1 exam and candidate for CFA Level 2 exam

#### WORK FXPFRIFNCE

#### **GOLDMAN SACHS**

QUANTITATIVE STRATEGIST, ASSOCIATE, FIXED INCOME DESK, GSAM Aug 2017 - July 2019 | Bangalore, India

- Implemented and back-tested macro and govt/swap strategies to help portfolio managers trade different assets
- Built the caching infrastructure to store the real time data for financial products to enhance the performance of the back-test engine for systematic strategies
- Created the bridge between Python and Slang to create a multi environment research platform
- Created and improved risk management, performance and compliance monitoring tools for portfolio managers and traders
- Revamped the pricing model and added new factors in the risk model to attribute the returns for financial products at a more granular level

#### ANALYST, DATA PLATFORM, GSAM

June 2014 - July 2017 | Bangalore, India

- Designed the different components of technological stack for GSAM's data platform, comprising of a database layer to store the data, a compute layer to transform the data and a serving layer to serve the data with low latency
- Optimised SlangQL, the query language for Slang, by parsing the syntax tree
- Managed the complete infrastructure of MemSQL, an in-memory distributed database to store the data cache used for generating reports, and to render the data to the clients in sub-seconds time-frame

### DELHI METRO RAIL CORPORATION (DMRC) | SUMMER INTERN

June 2013 - July 2013 | New Delhi, India

• Developed a central document management system (DMS) for storing and tagging the internal documents, which eliminated the need to keep multiple copies of documents on local systems

#### **CENTRE FOR RAILWAY INFORMATION SYSTEMS** | INTERN

June 2012 - July 2012 | New Delhi, India

• Developed a web enabled coaching refund system to manage the bookings and cancellations for the parcels sent through Indian Railways. This system was deployed in all the railway stations across India for three years

### RESEARCH

## CLIENT-SIDE AUTHORISATION & AUTHENTICATION IN A COLLABORATIVE CLOUD

DEPARTMENT OF COMPUTER SCIENCE, NSIT (DR. M.P.S. BHATIA)

- Developed a multi-user collaborative application to allow sharing and editing by different users at the same time
- Encrypted the documents on the client side before uploading them to address the data security vulnerabilities

## ANT BASED CLUSTERING ALGO IN ADHOC NETWORKING DEPT OF INFORMATION TECHNOLOGY, NSIT (DR. SANJAY DHURANDHER)

- Research project on developing an efficient ant colony based clustering algorithm in mobile adhoc network
- Created a probabilistic indicator to choose the cluster head based on the pheromone value associated with the node & its visibility in the network