Anup Walvekar

Postdoctoral Fellow at NUS, Singapore

Profile Highlights

- Data Researcher with strong background in Programming, Mathematics and Algorithms
- Solid analytical and modelling skills with experience in large data processing, automation, feature extraction and analysis

Work Experience

Experience in Developing Scalable Applications

Jul 2018–   **Postdoc**, *NUS*, Singapore.
- Worked with team Arsenal to evaluate player performance,
- Developed platform (in PHP/Javascript) to collect data from football videos and a tool to analyse the data.

2013-2018   **PhD Student**, *INSEAD*, Singapore.
- Developed coverage maps (heat map representing control of each teams on each point on field) in R/C++ and later oversaw its conversion to C++/CUDA,
- Worked with team Molde (Norway) on their goal keeper passing strategies,
- Scraped data using python (Scrapy/Selenium/Beautiful Soup) for research from various websites,
- Developed multiple methods for clustering customers arriving into the store into groups that are shopping together.
- Simulated (in C++) customer arrivals to compare various methods to find groups of customers.

2011–2013   **Research Associate**, *INSEAD*, Fontainebleau.
- Used Pentaho kettle tool to build a database from raw data in text format. Automated the process to make it efficient and error-free,
- Developed (in Ruby) contextual measures using detailed data on players positions on the pitch.

2010-2011   **Quantitative Researcher**, *Dolat Capital*, Mumbai.
- Developed and executed profitable High Frequency Trading strategies (in C++),
- Designed and implemented a stock market simulation framework using historical data (in C++),
- Oversaw the deployment of the trading strategies (translation of trading strategies to production code),
- Developed an internal tool to monitor and evaluate the performance of all the strategies in real time.

Research, Teaching and Mentoring

2013-2018 **PhD Student**, *INSEAD*, Singapore.
- Identified different time wasting strategies (in Football) and their sources,
- Studied the different types of referee biases, home team bias, favourite/underdog bias,
- Presented my research at reputed conferences in the USA,
- Mentored Research Assistants in the development of coverage maps,
- Designed and taught Mathematics tutorials to incoming PhD students,
- Conducted tutorials for Operations Management course for MBA students.

2011-2013 **Research Associate**, *INSEAD*, Fontainebleau.
- Studied the tackling and fouling patterns of patterns,
- Developed various measures to analyse football.

Skills

Programming C/C++, Python, R, SQL, Bash, Ruby, Java, Matlab

Mathematical Algorithms, Statistics, Machine Learning, Optimization, Dynamic Programming

Languages English, Hindi, Marathi

Education

2013-2018 **PhD in Technology and Operations Management**, *INSEAD*, Singapore.
- Thesis: May the best team win!
- Studied various sources of cheating in football that impact result.

2013-2015 **Masters in Management**, *INSEAD*, Singapore.
- GPA: 3.8/4.0

2008-2010 **Masters in Applied Statistic and Informatics**, *IIT Bombay*, Mumbai.
- GPA: 9.0/10.0

2005-2008 **B.Sc. (Hons.) Mathematics and Computer Science**, *Chennai Mathematical Institute*, Chennai.
- GPA: 8.0/10.0

Achievements

2013-18 Received full scholarship from INSEAD

2011 All India Rank (AIR) 2 in GATE Mathematics

2009 Received Dr. P V Sukhatme Award for securing 2nd rank in M. Sc.

2008-10 Recipient of NBHM M. Sc. Scholarship

2008 AIR 3 in Mathematics paper of Joint Admission Test for M. Sc.(JAM)

2008 AIR 27 in Statistics paper of JAM

2005 Rank 1 in Regional Mathematical Olympiad for Maharashtra region