

# Jayant Rao, PhD

Mobile: (909)-344-7085 Email: [jayant.rao@cgu.edu](mailto:jayant.rao@cgu.edu) Website: [www.jayantrao.com](http://www.jayantrao.com)

## Key Information

**Objective:** PhD Candidate looking for opportunities in Data Analytics, Model Development, & Quantitative Research and Analysis

### Work Experience:

- Industry : 2.5 years
- Teaching : 3 years

### Key Competencies:

- Mathematical, quantitative, statistical, financial, and economics based model developer, and researcher
- Experience in handling large, complex datasets
- Knowledge & understanding of financial products

### Programming Skills:

R, R Shiny, Matlab<sup>®</sup>, Python, Eviews<sup>®</sup>, TeX

### Quant. Modelling: 3 years

**Visa Status:** F1-OPT

## Quantitative Modelling and Programming Experience:

*Time series Econometrics, Financial modelling, Sentiment Analysis*

- Four-course series on Econometrics during PhD and Pricing Mechanisms of Financial Products during MBA and work at D. E. Shaw & Co. Concepts implemented includes ARMA-GARCH, Back testing, Sentiment Analysis, Constant, Time-varying & Vine Copulas, Portfolio Optimization, Tail Dependence.

*R, Matlab, and Python*

- Different projects involved writing statistical models, explaining, checking, implementing the codes, monitoring the process and interpreting the results.
- **Matlab** for ARMA-GARCH, Time-varying Copula Estimation. **R programming** for modelling active portfolio management involving 20 assets. Created multiple **R Shiny Dashboards** consisting of interactive graphs and tables. Scraped data from the web using **Python** for sentiment analysis project

## Professional Experience:

*Analyst -- D.E. Shaw & Co, Hyderabad, India*

Feb 2013 – July 2015

- Experience across team Treasury, Asset-Backed Securities(ABS), and Convertible Arbitrage Strategy with a strong theoretical and working knowledge of assets such as Government Bonds, ABS, and Convertible Bonds.
- Negotiated price, haircut and repo rate on the ABS
- Managed corporate actions on debt and equity positions
- Liaised with traders in calculating position profit and loss.

*Intern -- State Bank of India, Mumbai, India*

May 2012 - June 2012

- Analyzed Indian Banking Industry with respect to its credit and deposit growth rate, showcasing periodic credit crunch and excess liquidity.
- Analyzed loan exposure of SBI (Mumbai Circle) in various industries vis-à-vis industry performance.
- Prepared a research paper on the comprehensive analysis and presented it to the management

## Teaching Experience:

Currently teaching Introductory Statistics at Loyola Marymount University, CA and taught Macroeconomics and World Economy to high school students, World Economy, Introductory and Intermediate Microeconomics, and Business Finance courses at California State Universities.

## Education:

PhD. Economics Claremont Graduate University, USA

October 2020

*(International Money and Finance, Econometrics, Financial Economics)*

PGDBM (MBA-Finance), N.L. Dalmia Institute of Mgmt. Studies & Research, India

May 2013

## Certificates:

Chartered Financial Analyst, ICAI, India

October 2012

Accounting Technician. ICAI. India

November 2009