

Dr. DEVIKA ARUMUGAM

(July 2022)

RESEARCH AREAS Algorithmic Trading, High-Frequency Finance, Market Microstructure, Quantitative and Computational Finance

EDUCATION **Indian Institute of Technology Madras, India**
Ph.D., Dec. 2016 - Sep. 2021
Cumulative GPA: 8.8/10
Thesis Title: A Game of Hide-And-Seek among Algorithmic Traders: Causal Links with Market Quality
Advisor: Dr. P. Krishna Prasanna

Indian Institute of Technology Madras, India
Five year Integrated Master's in Economics, Jul. 2010 - Jul. 2015
Cumulative GPA: 7.82/10
Thesis Title: Economic Growth and Fiscal Deficit: Evidence from India
Advisor: Dr. Anup Kumar Bhandari

RESEARCH EXPERIENCE **Indian Institute of Technology Madras, India**
Post-Doctoral Equivalent Fellow, Jun. - Sep. 2021
Project Title: Algorithmic Trading
Advisor: Dr. P. Krishna Prasanna

Goizueta Business School, Emory University, USA
Fulbright-Nehru Doctoral Fellow and Visiting Researcher, Aug. 2019 - Jul. 2020
Project Title: High-Frequency Trading
Advisor: Dr. Tarun Chordia

WORK EXPERIENCE **Great Lakes Institute of Management Chennai, India**
Assistant Professor (Finance), Oct. 2021 - Jun. 2022

Indian Institute of Management Indore, India
Assistant Professor (Finance and Accounting), Jul. 2022 -present

JOURNAL PUBLICATIONS **Arumugam, Devika, and P. Krishna Prasanna.** "Commonality and contrarian trading among algorithmic traders." **Journal of Behavioral and Experimental Finance** (2021): 100495. DOI: <https://doi.org/10.1016/j.jbef.2021.100495> (ABDC: A) (Job market paper)

Arumugam, Devika, and P. Krishna Prasanna. "A Game of Hide-and-Seek between Proprietary and Buy-Side Algorithmic Traders: Causal links with Market Quality." **Applied Economics** (2021). DOI: <https://doi.org/10.1080/00036846.2021.1907290> (ABDC: A)

HONORS AND FELLOWSHIPS **Fulbright-Nehru Doctoral Research Fellowship**, United States - India Educational Foundation (USIEF) and Fulbright Commission, 2019

Junior Research Fellowship and **National Eligibility Test**, University Grants Commission, Government of India, 2015

Senior Research Fellowship, University Grants Commission, Government of India, 2018

Post Doctoral Equivalent Fellowship, Indian Institute of Technology Madras, 2021

**UNDER
REVIEW**

Arumugam, Devika, P. Krishna Prasanna, Rahul R Marathe. Do Algorithmic Traders Exploit Volatility? (Under Review with Journal of Behavioral and Experimental Finance)

Arumugam, Devika. Stealth-trading in Odd Lots: Do Algorithmic Traders Move Prices? (Under Review with Applied Economics)

**WORKING
PAPERS**

Arumugam, Devika. Algorithmic Traders' High-Frequency Profitability and Intraday Trading Behavior.

Arumugam, Devika. Algorithmic Trading and Intraday Tail Risk.

CONFERENCES

Presented paper titled, **When do Algorithmic Traders Make or Take Liquidity? Evidence from Indian Interest Rate Futures**. at the *9th International Conference on Futures and Other Derivatives (ICFOD)* Virtual, Dec. 5 2020.

Presented paper titled, **Do Algorithmic Traders Exploit Volatility?** at the *DoMS Research Symposium, 2021* , Chennai, India, Mar. 19 2021.

Presented paper titled, **Algorithmic Trading and Volatility: A Chicken-and-Egg problem** at the *31st International Trade and Finance Association Annual Conference*, Virtual, May 28 2021.

**WORKSHOPS/
PROGRAMS
ATTENDED**

Fulbright Enrichment Seminar, **2020 Technology and Innovation: The Entrepreneurial Landscape of Silicon Slopes** held at Salt Lake City, Utah, USA (Jan. 30 to Feb. 2, 2020).

Indian Institute of Management Ahmedabad (IIMA), Doctoral Summer School, 2018 held at IIMA, India (Apr. 1 to 5, 2018).

Certificate Program on Frontiers of Development Research held at the Institute for Financial Management and Research, Chennai, India (Dec. 3 to 5, 2016).

IN MEDIA

How Algorithmic Traders Put An Impact On Stock Market: IIT-Madras Study, NDTV, on 01.17.2022. ([click here](#))

**SOFTWARE
SKILLS**

R, PYTHON, STATA, EVIEWS, SPSS, L^AT_EX