MIHIR G. PATHAK

EXPERIENCE

Quantitative Researcher, Investments – McKinsey & Company, MIO Partners 9/2015 – Present

- Design, build, and employ trade and analysis tools for equity derivatives, exotic options, and volatility-based asset class financial products; identify investment opportunities and pitch prospects to senior management
- Manage and lead high value board reviewed projects and deliver them to the chief investment officer, head of asset allocation, head of volatility, and head of strategy – serve as right hand to head of strategy
- Completed the formation of a brand new quant research team and development of research and trading infrastructure within 8 months, when original deadline was 2 years
- Perform macroeconomic quantitative and qualitative research, extract insights from research outputs, and lead discussions with senior portfolio managers and head of investments
- Manage team of 12 business and quant research analysts, leveraging them to develop research and deliver outputs while managing/coordinating their capacity, train and mentor/coach analysts
- Lead and head special projects, manage cross-functional teams, and prioritize objectives

Head of Strategy/Special Projects & Legislative Affairs Specialist, NASA HQ 4/2015 – 9/2015

- Led agency special projects and cross cutting projects on behalf of senior leadership
- Managed Congressional hearing preparation process for Administrator on FY16 President's budget request
  - Secured and expanded NASA budget to over $18 Billion for 2015 and over $19 Billion for 2016
- Shaped and influenced new NASA ideas and strategies, provided intelligence, shared expertise
- Served as NASA liaison between Congress, Office of President, and industry/academic partners
- Finalist for NextGen Courageous Champion Public Service Award - *recognizes individuals with less than 3 years of government experience who are blazing a path with courage and determination*

Policy Advisor - Entrepreneurship, National Economic Council, White House 8/2014 – 4/2015

- Led major projects and initiatives with large teams and multiple moving parts under tight timelines including
  - SelectUSA – closed $3 Billion from Swiss companies to invest in their U.S. operations
  - SupplierPay - secured 47 total companies pledging to offer financing solutions to their small suppliers
- Coordinated with policy councils, agencies, outside entities, and other stakeholders on topics including entrepreneurship, small business, finance, and investments; led and organized outreach strategies
- Developed partnership strategies and managed programs and projects across entire work streams
- Drafted and presented economic policy proposals to senior White House leadership
- Provided policy analysis, research, and counsel to NEC, OSTP, and Administration leadership
- Managed team of analysts and interns on multiple projects, provided mentorship and development

Legislative Affairs Specialist – Science, NASA HQ 10/2013 – 8/2014

- Served as NASA liaison between Congress (Authorization and Appropriations Committees), Office of President, and industry/academic partners; Managed the $5+ Billion Science Mission Directorate portfolio
- Planned/executed major activities: Congressional hearings, briefings, meetings, prepared NASA testimony
- Identified, tracked, and summarized proposed legislative actions directly impacting NASA programs
- Performed and led special research projects for complex program issues with cross-functional teams
- Managed regular communication with Senior Executives and large stake holders, attended major events
- Worked contracting actions including closing and communicating new awards
- Prepared and delivered presentations, wrote reports, led breach reporting process
- Spoke at various roundtable engagements and leadership events, mentored young professionals/students
- President of PMF Council: organized and planned events, developed new strategies for improving program

Director of Strategy & Business Development, EuQuant Inc. 8/2011 – 9/2013

- Led advanced projects/initiatives; performed economic analysis for small businesses and start-ups
- Co-created Gazelle Index® which provides timely information on small business related economic developments and research on the performance of businesses owned by minority entrepreneurs
- Developed: ideas/strategies, collaborations, new business; closed deals, delivered presentations

Doctoral Candidate & Laboratory Supervisor, Georgia Tech Cryo Lab 8/2010 – 8/2013

NASA Space Technology Research Fellow
Visiting Scientist, NASA Goddard Space Flight Center 3/2013 – 8/2013
Visiting Scientist, Caltech/NASA Jet Propulsion Laboratory 8/2012 – 3/2013
Visiting Scientist, NASA Ames Research Center 8/2011 – 8/2012

President & Co-Founder, Mechistry Technologies, LLC 5/2010 – 8/2012
- Founded company focused on medical technology products
- Prepared business plan and legal docs, pitched to investors, managed projects/team, business strategy

Engineering & Science Insight Program, McKinsey & Company 6/2012

EDUCATION

Georgia Institute of Technology
Doctor of Philosophy, Mechanical Engineering 8/2013
Dissertation Topic: Periodic Flow Physics in Porous Media of Regenerative Cryocoolers

Georgia Institute of Technology
Master of Science, Mechanical Engineering 8/2010
Thesis: Thermal Dispersion and Convective Heat Transfer during Laminar Pulsating Flow in Porous Media

Georgia Institute of Technology
Bachelor of Science, Mechanical Engineering, Highest Honors/Summa Cum Laude 12/2008

FELLOWSHIPS & AWARDS

NextGen Courageous Champion Public Service Award Finalist 7/2015
Presidential Management Fellowship, U.S. Government 1/2013 - Present
NASA Space Technology Research Fellow, NASA 8/2011 – 8/2013
Georgia Tech Presidential Fellow, Georgia Tech 8/2010 – 8/2013
G.W. Woodruff Presidential Fellow, Mechanical Eng. Dept. 8/2010 – 8/2013
Patent Application, Domestic Lifting Dolly, U.S. 61/192,305 2008

SELECT PEER-REVIEWED PUBLICATIONS & PRESENTATIONS

1. *Pathak, et al, Hydrodynamic parameters for ErPr under steady and periodic flow conditions, Cryogenics, 2013*
2. *Pathak, Patel, Mulcahey, and Ghiaasiaan, Conjugate Heat Transfer and Hydrodynamic Resistance Parameters during Steady and Periodic Laminar Flow in Porous Media of Regenerative Cryocoolers, AIAA Thermophysics, 2013*
3. *Pathak, Patel, Ghiaasiaan, Mulcahey, Helvensteijn, Kashani, and Feller, Hydrodynamic resistance parameters for ErPr rare-Earth regenerator material under steady and periodic flow conditions, Adv. in Cryogenic Eng., 2013*
4. *Mulcahey, et al, and Pathak, Investigation of gravitational effects in pulse tube cryocoolers using 3-D CFD, Adv.Cryo Eng., 2013*
5. *Pathak, et al, Conjugate Heat Transfer during Oscillatory Laminar Flow in Porous Media, Int. J. of Ht and Mass Trans, 2012*
6. *Pathak, et al, The Design and Development of a High-Capacity Cryocooler Regenerator for Space Exploration, AIAA, 2012*
7. *Mulcahey, Pathak, et al, The effect of flow pulsation on drag and h.t. in an array of heated square cylinders, Int. J. of T.Scie, 2012*
8. *Mulcahey, Pathak, et al, Drag coefficient and Nusselt number for laminar pulsating flow in porous media, Cryocoolers 17, 2012.*
9. *Pathak, Mulcahey, and Ghiaasiaan, Hydrodynamic and thermal effects of drag and heat transfer coefficients under laminar unsteady flow conditions in porous media, Advances in Cryogenic Eng., 2011*
10. *Conrad, Pathak, et al, The Effect of Component Junction Tapering on Miniature Cryocooler Performance, Adv Cryo Eng., 2011*
11. *Pathak et al, Thermal Dispersion and Convective Heat Transfer during Laminar Pulsating Flow, Int.l J. of Thml Sci, 2010*
12. *Pathak et al, Thermal Dispersion and Convection Heat Transfer during Laminar Pulsating Flow, Cryocoolers 16, 2010*
13. *Landrum, Pathak, et al, Effect of Freq. on Hydrodynamic Parameters of Mesh Fillers in Osc. Flow, Cryocoolers 16, 2010*