

Aditya Mahadev Prakash

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Education	Doctoral Student, Industrial & Systems Engineering, <i>University of Florida, Gainesville, FL (UF)</i> Grade Point Average (GPA) : 3.91/4.0	Exp. May 2020
	Post Graduate Diploma in Management, <i>Indian Institute of Management, Bangalore, India (IIMB)</i>	Mar 2015
	Bachelor of Technology [Hons.], Civil Engineering, <i>Indian Institute of Technology, Kharagpur, India (IIT KGP)</i> Grade Point Average: 8.38/10.00	Jun 2013
Awards	<ul style="list-style-type: none">• Hearn Graduate Research Award for application and theory of operations research, UF, 2019• Best Healthcare Automation Paper: IEEE CASE Conference, 2019• Best Track Paper: Healthcare Systems Track, IISE Annual Conference, 2018• 1/30 semi-finalists: Poster competition, Inform's Annual Meeting, 2018• 1/8 semi-finalists: OR-focused RAS Problem Solving Competition, INFORMS, 2018• Runner up: Google Games UF - coding competition, UF, 2017• Institute Silver Medal for graduating with the highest GPA in the program, IIT KGP, 2013• Award for Best Thesis Project, Department of Civil Engineering, IIT KGP, 2013	
Publications	<ul style="list-style-type: none">• A. M. Prakash, Q. He & X. Zhong, "Evaluation of E-consults in healthcare delivery," <i>Proceedings of IEEE Conference on Automation Science and Engineering</i>, 2018• A. M. Prakash, Q. He & X. Zhong, "Incentive-Driven Post-Discharge Compliance Management for Chronic Disease Patients in Healthcare Service Operations," <i>IISE Transactions on Healthcare Systems Engineering</i>, 2018.• X. Zhong & A. M. Prakash, "Implementability Analysis of Primary Care Delivery with E-Visits," major revision, <i>Manufacturing & Service Operations Management</i>, 2018.• X. Zhong, A. M. Prakash, L. Petty & R.A. James, "Bottleneck Analysis to Reduce Information Flow Delay in Primary Care to Specialty Care Referral Processes," <i>IEEE Transactions on Automation Science and Engineering</i>, 2018.	
Conference Presentations	<ul style="list-style-type: none">• A. M. Prakash, Q. He & X. Zhong, "Evaluation of E-consults in healthcare delivery," <i>IEEE Conference on Automation Science and Engineering</i>, 2018• A. M. Prakash, Q. He & X. Zhong, "Incentive-driven Readmission Management with Patients Facing Compliance Barriers", IISE Annual Conference, 2018• X. Zhong & A. M. Prakash, "Implementability Analysis of Primary Care Delivery with E-Visits," INFORMS Annual Conference, 2017	
Research and Academic Projects	Graduate Research Assistant, University of Florida, FL <i>Research Advisor: Dr. Xiang Zhong</i> <ul style="list-style-type: none">• Modeling, analysis & optimization of complex stochastic systems using queuing & game theory with particular emphasis on service systems with strategic heterogeneous customers.• This framework used in the design and analysis of virtual healthcare system concepts like e-visits, e-consults & patient adherence to medication	Aug 2016 - Present
	Other Projects <ul style="list-style-type: none">• Presented seminar on <i>Latent Dirichlet Allocation</i>, Adv. Machine Learning, UF 2017• Implemented reinforcement learning methods - value & policy iteration, Q-learning for stochastic control of unmanned lunar vehicle, <i>Stochastic control</i>, UF 2017• Implemented a link recommendation algo. using supervised random walks, IIM-B 2014• Optimal design of structures using evolutionary algo. (Best Thesis Award), IIT KGP 2013	

Employment	<p>Summer Intern May 2019 - Jul 2019 <i>Mayo Clinic, Rochester, Minnesota, USA</i></p> <ul style="list-style-type: none"> • Conducted field observations, interviewed clinical staff, assisted physicians in designing surveys and focus group questionnaires for systematic study of diagnostic error • Processed & analyzed electronic health records; developed tools for visualization and dimensionality reduction • Developed & validated a discrete event cum agent based simulation model in AnyLogic for quantitative analysis of patient flow and physician cognitive workload • Adapted SEIPS framework for the qualitative characterization of the causes of diagnostic error at a system level • Work selected for poster presentation at Diagnostic Error in Medicine International Conference 2019
	<p>Associate Apr 2015 - Jul 2016 <i>Synergy Consulting Inc., Infrastructure Financial Advisory, Delhi, India</i></p> <ul style="list-style-type: none"> • Financial modeling & audit, risk analysis, commercial & contractual due diligence services for 900 MW hydropower project (Nepal), 660 MW coal power plant (India), 750 MW CCGT project (Iraq) • Analyzed the gas-to-power sector of a West African nation and provided financial advisory services to its government body for managing cash flows and planning investments in the sector • Buy-side due diligence, risk analysis and financial modeling services to a Middle East developer for acquiring district cooling assets in UAE
	<p>Management Intern Apr 2014 - Jun 2014 <i>Nestle India Ltd., Gurgaon, India</i></p> <ul style="list-style-type: none"> • Performed secondary research on the Indian market, consumer behaviour and regulatory environment to explore opportunities for kids' snacking • Estimated an opportunity worth INR 11.4bn & recommended broad marketing strategy
	<p>Structural Engineering Intern May, 2012 - July, 2012 <i>Eversendai Construction Pvt. Ltd., Chennai</i></p> <ul style="list-style-type: none"> • Performed structural analyses and optimally designed a 145m X 20m steel truss extension to hangar at Mumbai Intl. Airport
Leadership Experience	<ul style="list-style-type: none"> • Head, Publicity & Media Relations, Student Cultural Committee, point of contact for media houses & participants across 200+ colleges during the annual cultural festival of institute, IIMB 2015 • Treasurer, Student Cultural Comm., managed funds worth ₹700k for cultural events, IIMB 2015 • Secretary, ISE Graduate Student Organization: instrumental in founding organization; responsible for record-keeping and communication, UF 2018. • Senior Coordinator-Literature, Quizzing and Debate club: conducted 3+ quizzes and literature events; organized first ever <i>Nihilanth</i> (Inter IIM-IIT quiz championship) at IIM-B 2014
Affiliations	<ul style="list-style-type: none"> • Member, <i>Tau Beta Pi</i>-Florida Alpha Chapter, Engineering Honor Society, UF 2018. • Student member, INFORMS, IISE, IEEE
Skills	<p><u>Machine Learning</u>: Regression models, reinforcement learning, time series forecasting & RNN, NLP (LDA), Bayesian methods</p> <p><u>Programming Languages</u>: Java, Python (Numpy, Pandas, Scikit-Learn, Keras), Matlab, SQL</p> <p><u>Software</u>: Gurobi, GAMS, AnyLogic, Arena Simulation, MS Excel & VBA</p> <p><u>Finance</u>: Financial modeling, derivative pricing, dynamic programming</p>