

Vivek Kaushal

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Education	IIIT, Hyderabad 2016-2021 B.TECH WITH MS IN COMPUTER SCIENCE AND ENGINEERING Bachelor of Technology in Computer Science and Engineering with a Masters by Research. Primary area of research being Decision Making. CGPA : 7.96
	St.Michael's High School 2006-2016 HIGH SCHOOL DIPLOMA High School Diploma in Sciences and Information Practices with 95.6%.
Interests	Research: Decision Making • Behavioral Economics • Artificial Intelligence Academics: Usability Engineering • Machine Learning • Game Theory • Software Engineering Development: Shell Scripting • Full Stack and Mobile Development • Automation • Augmented Reality
Experience	National Taiwan University, Taipei May, 2019 - Present RESEARCH ASSISTANT Worked under Professor Hendrik Rommeswinkel on two distinct projects: An exploration of virtual economics in computer based MMOG transactions to better understand the definition of a product, in contrast to assumptions of welfare economics; and a study on Freedom of Choice through statistical analysis using R on large-scale consumer data in US markets.
	Cognitive Sciences Lab, IIIT-H 2017 - Present UNDERGRADUATE RESEARCHER Research work and experimentation in the field of Risk and Decision Making under Dr.Kavita Vemuri. Presented results for of an experimental setup exploring Risk Propensity at the FUR Conference, University of York in June, 2018. Currently exploring further concepts in financial risk via experimentation and application of machine learning and data analysis.
	IIIT Hyderabad August, 2018 - April, 2019 TEACHING ASSISTANT Accepted as a Teaching Assistant for the course Structured System Analysis and Design under Dr.Raghu Reddy owing to academic excellence in the course for Monsoon, 2018. Also accepted as a Teaching Assistant for Engineering Systems under Dr. KS Rajan for Spring, 2019. Workload for a TA involved teaching students, designing and grading assignments while also mentoring projects.
	T-Hub January, 2018 - February, 2019 MARKET RESEARCH ANALYST T-Hub is Asia's largest start-up incubator. Wrote research papers on topics in technology, publications in reputed media outlets as well as in-house circulation for the start-up community. Topics varied from cross-domain market opportunities to deconstruction of implemented strategies. Valuation of all T-Hub start-ups based on provided economic parameters also undertaken.
	Entrepreneurship Cell, IIIT-H August, 2016 - April, 2019 OVERALL HEAD Structured and curated a multi-tiered team of 30+ individuals. Started as the Head of Tech in 2016, was promoted to overall Head in April 2018. Launched multiple initiatives and established long-term collaborations with corporate and other institutions. Headed India's largest student-organized Hackathon - Megathon, ensured exponential growth, established a well-respected brand in three years.
	Wowsome January, 2017 - April, 2017 AUGMENTED REALITY INTERN Worked with Vuforia in Unity3D for development of production scale Augmented Reality Applications. Coded the application in C# using Unity3D with backend integration to Amazon Web Servers. Application developed used for ticketing platforms and cross-platform advertisement in real world scenarios.

Conferences	Foundation of Utility and Risk, 2018 UNIVERSITY OF YORK Among the youngest presenters at the Foundation of Utility and Risk Conference in York, 2018. Presented a poster on Risk Propensity and its correlation with academic performance, net-worth and brand loyalty. A web-based game-like simulator was created to gauge financial decision-making. Publication Link : http://web2py.iit.ac.in/research_centres/publications/view_publication/inproceedings/1541	June, 2018
Major Projects	Consumer Freedom Measure BIG DATA ANALYSIS USING R Assisted the development of a data analysis codebase in R to draw inferences on a large-scale consumer behavior database that tracked 60,000+ US families' expenditure on goods over a period of 14 years. Besides development on the codebase, studied practical trends in data sciences and applied statistics.	2019
	AI Bot ARTIFICIAL INTELLIGENCE IN GAMES An artificial intelligent agent was coded using custom heuristics and Alpha-Beta pruning on mini-max decision trees to play Ultimate-Tic-Tac-Toe. The bot transversed decision trees and played moves that were best suited at a given point in the game as per the devised optimization algorithm.	2018
	Interactive Wall AUGMENTED REALITY BASED ADVERTISING A standalone advertising platform was built for interactive real-world advertising. Support for android and iOS based devices was provided for interactive advertising using visual data-points parsed by Vuforia engine in Unity3D. Presently used by 20+ consumer focused companies.	2017
	Terminal Shell C/C++ BASED DEVELOPMENT A custom terminal shell was coded in C++ based on the POSIX architecture with integrated syscalls. All common shell commands were had native support with syscalls used for less commonly used commands. An in-depth understanding of computer system architecture was gained in the process.	2017
	Custom SQL Engine PYTHON BASED DEVELOPMENT A custom SQL Engine was coded in Python to replicate the functionality of MySQL with support for complex data queries given a database structure. The Project was done for the credited Database Systems course under Dr. PK Reddy.	2018
Programming Skills	Day to Day: Python, JavaScript, Shell, Dart Familiar: R, MySQL, C/C++, C#, Java, Django, CSS, Unity3D, React, Flutter Operating Systems: OS X, Linux	
Relevant Courses	Research Specific: Artificial Intelligence Machine Learning Game Design Cognitive Neuroscience Systems: Database Systems Software Engineering Engineering Systems Foundation: Data Structures Structured System Analysis and Design Digital Logic	
Achievements	Dean's Merit List for Research, IIIT Hyderabad 99.94 Percentile in JEE (Rank 994) National Talent Search Scholarship, Government of India Bronze Medallist at Regional Mathematics Olympiad	2018 2016 2015 2016
Positions Held	Overall Head at Entrepreneurship Cell, IIIT-H Teaching Assistant, IIIT-H Member of Student Parliament, IIIT-H Treasurer at IIIT Toastmasters' Club Lead Organizer at Megathon Coordinator, Music Club IIIT-H School Captain Founder and Editor-in-Chief, School Newsletter	2017-2019 2018-2019 2016-2018 2017-2018 2016, 2017, 2018 2016-2017 2015-2016 2015-2016
Volunteer Work	Event Volunteer at TEDx, Hyderabad Member at Tarumitra (UN recognized Environmental Conservation Body)	2016 2014-2016