

Vivek Kaushal

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Education	IIIT, Hyderabad 2016-2021 B.TECH, CSE WITH MS IN CONGNITIVE SCIENCES Bachelor of Technology in Computer Science and Engineering with Masters by research in Computer Science and Cognitive Sciences. Primary area of research being Decision Making. CGPA : 7.9
	St.Michael's High School 2006-2016 HIGH SCHOOL DIPLOMA High School Diploma in Sciences and Information Practices with 95.6%.
Interests	Research: Behavioral Economics • Decision Making • Risk Academics: Machine Learning • Artificial Intelligence • Game Theory • Cognitive Sciences Development: Shell Scripting • Data Mining • Data Analytics • Augmented Reality
Experience	Cognitive Sciences Lab, IIIT-H 2017 - Present NEUROECONOMICS RESEARCHER Research work and experimentation in the field of Risk, Decision Making and Entrepreneurship 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 analytics.
	IIIT Hyderabad August, 2018 - December, 2018 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. The course explores a Structured and Systematic approach towards solving a problem at hand, work load for a TA involved teaching students, designing and grading assignments while also mentoring projects.
	T-Hub January, 2018 - Present 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 - Present 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-organised Hackathon - Megathon, ensured exponential growth, established a well-respected brand in three years.
	Wowsome January, 2017 - April, 2017 SOFTWARE DEVELOPEMNT 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 June, 2018 UNIVERSITY OF YORK Among the youngest presenters at the Foundation of Utility and Risk Coference in York, 2018. Presented a poster on Risk Propensity and its correlation with academic performance, personal network 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

Major Projects	<p>Risk Propensity Measure 2018 METHODOLOGY FOR BEHAVIORAL DATA COLLECTION</p> <p>A methodology was devised and a web-based application was coded in native JavaScript for remote data-collection. The application simulated real world choices and recorded responses in a game-like environment. Data collected was later used for research purposes, published and presented.</p> <p>AI Bot 2018 ARTIFICIAL INTELLIGENCE IN GAMES</p> <p>An artificially intelligent agent was coded using custom heuristics and Alpha-Beta pruning on minimax decision trees to play Ultimate-Tic-Tac-Toe. The bot traversed decision trees and played moves that were best suited at a given point in the game as per the devised optimisation algorithm.</p> <p>Interactive Wall 2017 AUGMENTED REALITY BASED ADVERTISING</p> <p>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 datapoints parsed by Vuforia engine in Unity3D. Presently used by 20+ consumer focussed companies.</p> <p>Sentinel 2017 AUGMENTED REALITY BASED TICKETING</p> <p>A standalone cross-platform ticketing application coded in C# using Unity3D with Vuforia engine for image tracking. Backend integration with AWS was also embedded. The application has since been used at multiple mass-attendance events and concerts for swift ticketing without human-intervention.</p> <p>Terminal Shell 2017 C/C++ BASED DEVELOPMENT</p> <p>A custom terminal shell was coded in C++ based on the POSIX architecture with integrated syscalls. All common shell commands were natively supported with syscalls used for less commonly used commands. An in-depth understanding of computer system architecture was gained in the process.</p> <p>Custom SQL Engine 2018 PYTHON BASED DEVELOPMENT</p> <p>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.</p>
Programming Skills	Day to Day: Python, MATLAB, JavaScript, Shell Familiar: MySQL, C/C++, C#, JAVA, Django, CSS, Unity3D Operating Systems: OS X, Linux
Relevant Courses	Domain Specific: Artificial Intelligence Machine Learning Game Design 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 2018 99.94 Percentile in JEE (Rank 994) 2016 National Talent Search Scholarship, Government of India 2015 Bronze Medallist at Regional Mathematics Olympiad 2016
Positions Held	Overall Head at E-Cell, IIIT-H 2016-Present Teaching Assistant, IIIT-H 2018-Present Memeber of Student Parliament, IIIT-H 2016-2018 Treasurer at IIIT Toastmasters' Club 2017-2018 Lead Organizer at Megathon 2016, 2017, 2018 Coordinator, Music Club IIIT-H 2016-2017 School Captain 2015-2016 Founder and Editor-in-Chief, School Newsletter 2015-2016
Volunteer Work	Event Volunteer at TEDx, Hyderabad 2016 Member at Tarumitra (UN recognised Environmental Conservation Body) 2014-2016