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 Financial 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: Behavioral Economics • Decision Making • Risk • Artificial Intelligence
Academics: Machine Learning • Game Theory • Usability Engineering • Software Engineering
Development: Shell Scripting • Full Stack Development • Automation • Augmented Reality

Experience

National Taiwan University, Taipei   May, 2019 - Present
VISTING RESEARCH STUDENT

Working under Professor Hendrik Rommeswinkel on Freedom of Choice and related topics using concepts of Computer Science and Neuroeconomics. Project also focuses on Neuromarketing and underlying behavioural concepts. Careful study of existing literature and possible experimentation constitute the work being undertaken.

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 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-organised Hackathon - Megathon, ensured exponential growth, established a well-respected brand in three years.

Wowsome   January, 2017 - April, 2017
SOFTWARE DEVELOPMENT 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 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.iiit.ac.in/research_centres/publications/view_publication/inproceedings/1541

Major Projects	**Risk Propensity Measure**	2018
	METHODOLOGY FOR BEHAVIORAL DATA COLLECTION	

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.

AI Bot	2018
ARTIFICIAL INTELLIGENCE IN GAMES	

An artificial intelligent agent was coded using custom heuristics and Alpha-Beta pruning on mini-max decision trees to play Utimate-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.

Interactive Wall	2017
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 datapoints parsed by Vuforia engine in Unity3D. Presently used by 20+ consumer focused companies.

Terminal Shell	2017
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.

Custom SQL Engine	2018
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.

Programming Skills	Day to Day: Python, JavaScript, Shell, React
	Familiar: MySQL, C/C++, C#, JAVA, Django, CSS, Unity3D
	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	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	2016-2019
	Teaching Assistant, IIIT-H	2018-2019
	Member 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