## 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. 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

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Experience National Taiwan University, Taipei

May, 2019 - July, 2019

RESEARCH ASSISTANT

Worked under Professor Hendrik Rommeswinkel on a study to assess consumers' freedom of choice in US markets using a large database of transactions across years of consumer expenditure. I devised and coded a large number of statistical models in R for big data analysis on the mentioned database.

Cognitive Sciences Lab, IIIT-H

August, 2017 - Present

UNDERGRADUATE RESEARCHER

Worked on experiments 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 taking and neuroeconomics.

T-Hub
INFORMATION RESEARCH INTERN

January, 2018 - February, 2019

T-Hub is Asia's largest start-up incubator. Worked closely with T-Hub start-ups to write research papers on topics in technology for in-house circulation and publication for the start-up community. Topics varied from cross-domain market opportunities to deconstruction of implemented strategies.

**DreamVu Inc.** August, 2019 - Present

MARKET RESEARCH ASSOCIATE

Worked on strategies for market entry and disruption in the B2B segment of the robotics and computer vision industry. Reported directly to the COO with research insights and gauged opportunities for product sale, enhancement and use cases for market disruption.

**IIIT Hyderabad** 

August, 2018 - April, 2019

TEACHING ASSISTANT

Accepted as a Teaching Assistant for the courses: Structured System Analysis and Design under Dr.Raghu Reddy for Monsoon, 2018, and Engineering Systems under Dr. KS Rajan for Spring, 2019. Workload involved teaching students, designing and grading assignments while also mentoring projects.

Entrepreneurship Cell, IIIT-H

August, 2016 - April, 2019

OVERALL HEAD

Structured and curated a multi-tiered team of 30+ individuals. Launched multiple initiatives and established long-term collaborations with corporate 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.

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.iiit.ac.in/research centres/publications/view publication/inproceedings/1541

Major Projects

## **Consumer Freedom Measure**

2019

June, 2018

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.

Al 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 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.

**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, 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, III1 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

2017-2019
2018-2019
2016-2018
2017-2018
2016, 2017, 2018
2016-2017
2015-2016
2015-2016

Volunteer Work

Event Volunteer at TEDx, Hyderabad 2016 Member at Tarumitra (UN recognized Environmental Conservation Body) 2014-2016