Vivek Kaushal

GITHUB @kaushalvivek   **LINKEDIN** /vivekkaushal1998   **WEBSITE** vivekkaushal.com   **EMAIL** vivek.kaushal@research.iiit.ac.in

Education		
	IIIT, Hyderabad	2016-2021

B.TECH WITH MS BY RESEARCH IN COMPUTER SCIENCE AND ENGINEERING

CGPA : 8.05 | Merit List for Academic Excellence, 2019 | Dean's List for Research, 2018

Experience

National Taiwan University, Taipei   May, 2019 - July, 2019
RESEARCH ASSISTANT - BIG DATA ANALYSIS

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

Working in the field of Human Computer Interaction under Dr. Kavita Vemuri. Presented work at multiple conferences -- listed below. Currently working on the evaluation of visual advertisements from a cognitive perspective and optimization using machine learning models.

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.

T-Hub   January, 2018 - February, 2019
INFORMATION RESEARCH INTERN

Worked closely with T-Hub start-ups to write papers on topics in technology for in-house circulation and publication. Topics centered around domain specific market opportunities and data analysis.

DreamVu Inc.   August, 2019 - Present
MARKET RESEARCH INTERN

Worked on strategies for market entry and disruption in the robotics and computer vision industry. Reported directly to the COO and CEO with research insights and gauged market synergies.

Wowsome   January, 2017 - April, 2017
AUGMENTED REALITY INTERN

Worked with Vuforia in Unity3D for production scale Augmented Reality Applications. Built the platform from scratch in C# using Unity3D with backend integration to AWS. Two distinct projects : Sentinel - An AR based ticket checker; Interactive Wall - an innovative AR based advertising platform.

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.

Research Work

Foundation of Utility and Risk Conference   June, 2018
UNIVERSITY OF YORK, YORK, UK

Poster presented on a pilot study of risk propensity and academic performance using a choice simulator.

Sixth Annual Conference of the Association for Cognitive Sciences in India   December, 2019
BITS PILANI GOA CAMPUS, GOA, INDIA

Paper accepted on "Investigating Academic Performance and Financial Risk-Taking" -- poster presented. DOI : 10.13140/RG.2.2.19873.56160

Major Projects	**Consumer Freedom Measure**	2019

Consumer Freedom Measure   2019
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.

Click-bait and Advertisements   2019
HUMAN COMPUTER INTERACTION | EYE-TRACKING

Worked with Dr. Prithwiraj Mukherjee, IIM Bangalore, on a study of user interaction with ads on click-bait articles. Tobii x120 eye-tracker and python used for experimentation and data analysis respectively. Handled experimentation and data analysis, with active contribution in experiment design.

Financial Risk Behaviour Assessment   2018
BEHAVIOURAL ECONOMICS | COGNITIVE SCIENCE

A web-app was coded for a comparative study of financial risk intelligence and academic performance. The application simulated real world choices and recorded responses in a game-like environment. Data collected was analysed and the results published at 6th ACCS, 2019 - BITS Pilani, Goa Campus.

3D Animation Action Recognition   2019
COMPUTER ANIMATION | DATA ANALYSIS

Extensive data analysis done on a collected dataset to test whether it's easier to identify 3D avatar based action renders as compared to 3D skeleton based action renders. Study has applications in computing resource conservation and assessment of difficulty in action recognition.

Interactive Wall   2017
AR/VR | UNITY3D

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.

Expenses Tracker App   2019
IOS/ANDROID DEVELOPMENT | FLUTTER

An expense tracker app built in Flutter using Dart to provide cross platform support for both iOS and Android devices. Functionality includes adding, removing, editing and visualizing expenses.

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.

Skills
Day to Day: Python, JavaScript, Shell, Git, PyTorch, Dart - Flutter, Flask
Familiar: R, Tensorflow, MySQL, MATLAB, C/C++, C#, Java, Django, CSS, Unity3D, React
Operating Systems: OS X, Linux

Relevant Courses
Research: Artificial Intelligence | Research Methodologies | Game Design | Cognitive Neuroscience
Systems: Database Systems | Software Engineering | Compilers | Statistical Methods in AI
Foundation: Data Structures | Structured System Analysis and Design | Engineering Systems

Achievements

Merit List for Academic Excellence, IIIT Hyderabad	2019
Dean's List for Research, IIIT Hyderabad	2018
99.94 Percentile in JEE (Rank 992)	2016
National Talent Search Scholarship, Government of India	2015

Positions Held

Overall Head at Entrepreneurship Cell, IIIT-H	2017-2019
Teaching Assistant, IIIT-H	2018-2019
Member of Student Parliament, IIIT-H	2016-2018
Lead Organizer at Megathon	2017, 2018
Coordinator, Music Club IIIT-H	2016-2017
School Captain	2015-2016