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 and Mobile Development • Automation • Augmented Reality

Experience

May, 2019 - Present National Taiwan University, Taipei

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

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

June, 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.

2018 Al 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 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.

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: 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	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