

VISHAL AGARWAL

Senior Undergraduate, Dept. of Civil Engineering
Minor in Industrial and Management Engineering

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📍: Vishal Agarwal | in: Vishal-Agarwal

EDUCATION

Year	Degree/Certificate	Institute	Performance
2017 - Present	B.Tech	Indian Institute of Technology, Kanpur	7.52/10.00
2017	Grade 12 (CBSE)	DAV Public School, Kota	92 %
2015	Grade 10 (CBSE)	DAV Public School, Kota	10.0/10.0

AWARDS AND ACHIEVEMENTS

- 2019** Represented **IIT Kanpur** at **National Level** for Microsoft Academic Accelerator Program at Hyderabad and Bangalore
- 2019** Received **A*** grade in the course-work **Financial Economics**; Awarded to **Top 1% students** in a course at IIT Kanpur
- 2018** Achieved an All India Rank (**AIR**) **7** in the **World Code-Gym Challenge** among **1700+** participants across the nation
- 2017** Received **INSPIRE Scholarship** award by **Department of Science and Technology** among **100** students across IITK
- 2017** Secured All India Rank (AIR) of **6467** in JEE Advanced'17 and AIR **8625** in JEE Mains'17 among **~15 Lakh** students

WORK EXPERIENCE

Deskera | Software Development Intern April 2020 - June 2020
Supervisor: Mr. Prashant Majhwar (Sr. Technical Architect) Pune (India)

- Objective** ■ Developing an **Angular Library** from scratch that assists **Web Component** scanning across **Angular Web Apps**
- Strategy** ■ Developed an **Extractor** to store (Target-Id) & map (Angular component) preserving relationship of components
■ Optimized Library for **seamless integration** into core software base with single Configuration File & Event handler
■ Deployed to **npm** with Documentations, Proof of concept and code-snippets for **automated** On-Boarding Set-Up
- Impact** ■ Successfully completed development & testing of Library (**Ngx-Drive**) (**Now in Production on Deskera Books**)
■ Awarded a full time **Pre-Placement offer (PPO)**; Amongst **Top 5 out of 10** from IIT Kanpur to receive PPO

Ericsson | IoT Business Consultant Intern December 2018
Supervisor: Mr. Pavan Kumar Kolahal (IoT Business Consultant) Gurgaon (India)

- Objective** :- Establishing **business case** & proposing an **optimal entry strategy** of **5G** Cellular connectivity for Cloud platforms
- Work focused on key strategic ideas from IoT perspective for developers to utilize **5G** Cellular connectivity with Cloud platforms
- Analyzed **developer reports** of connectivity services offered to various cloud platforms addressing the lack of stable connectivity
- Prepared comprehensive research studies of subject market including market size & growth (**Part of Ericsson mobility report'19**)

Full Stack Developer Intern May 2018 - July 2018
IIT Kanpur Summer Of Code (Conducted by Nutanix and UPSIDC) Kanpur (India)

- Objective** :- Narrowing down projects by **extracting key ideas** from projects offered by professors in accordance to student needs
- Utilized **NLTK** Library for **NLP** to generate Tags and summarize projects offered by professors to increase reach among students
- Developed a dynamic and Interactive web application with a **Chat** and **Notification system** using **Web Sockets** and **VanillaJS**
- Added support for uploading project files & fetching data from server in **JSON** format; Designed Backend in **NodeJs** & **MongoDB**

KEY ACADEMIC PROJECTS

WebApp Penetration Testing May 2019 - July 2019
Supervisor: Prof. Sandeep Shukla (HOD CSE Dept) IIT Kanpur

- Pen-tested Institutes registration portal using BurpSuite & OWASP ZAP; Produced **POC** and Solutions of reported vulnerabilities
- Mapped the entire platform and discovered vulnerabilities sensitive to Student data, Faculty data and institutes main server details

Equity Trading May 2020 - June 2020
Course Project, Prof. Shankar Prawesh (IME Dept) IIT Kanpur

- Followed **Swing Trading** philosophy with **EMA crossover**, **MACD** and **RSI Index** indicators to manage 30 financial instruments
- Build an Optimal Diversified Portfolio utilizing **Markowitz model**; Computed sharpe ratio, return, volatility & covariance matrix
- Designed a model based on forecast returns & risk preferences to drive optimal asset allocation decisions using **Linear Programming**

TECHNICAL ACHIEVEMENTS

Microsoft Code.Fun.Do | National Winner out of 500+ teams across India Sep 2018 - Jan 2019
Supervisor: Mr. Pratik Golchha (Software Engineer) Hyderabad (India), Bangalore (India)

- Developed a **Cloud based platform** containing **Chat-Bots** & low latency disaster awareness system with Azure & Google SDKs
- Modelled **Earthquake** data fetched from **USGS** using **seasonal ARIMA** time series and **Long Short-Term Memory** models
- Utilized Python and ChartJs to clean, scrap and visualize **Wildfire** data fetched from **NASA** for statistics and time series analysis

PROGRAMMING ACHIEVEMENTS

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RELEVANT COURSEWORK

* - Ongoing ** - Online Course

Financial Econometrics
Applied Machine Learning

Financial Engineering
Data structure & Algorithms**

Introduction to Economics
Probability & Statistics

Financial Economics
Social Media Analytics*

TECHNICAL SKILLS

Programming	C, Python, JavaScript, TypeScript	Tools	Android Studio, Firebase, Burp Suite, Git
Libraries	Bootstrap, jQuery, Tensorflow	Utilities	Angular, NodeJs, MongoDB, Flutter

POSITION OF RESPONSIBILITY

Head Web | **Udghosh, Inter College Sports Festival, IIT Kanpur** **April 2019 - March 2020**

Leadership ■ Spearheading a **4-tier team** of **160+ executives** to conduct one of the biggest sports festival in Asia
■ **Recruited & guided 10** Web executives & worked **collaboratively** by delegating chores & responsibilities

Initiatives ■ Initiated a **Cross Platform App** with **Cloud Messaging** to send-in notifications of events with **Flutter**
■ Revamped registration, **automated** it for registration of **2000+** students from **80+** colleges across nation
■ Developed an online **MCQ Quizzing platform** with **1000+** participants across nation to promote sports culture
■ **Angular** framework with **Bootstrap** for modularity; Website Optimization with Backend in **NodeJs & Firebase**

Impact ■ Maneuvered a **130%** increase in reach of fest through ideation, development & execution of **online events**

Tech Manager & Core Team Member | **BloodConnect Foundation, India** **February 2019 - March 2020**

- Maintained BloodConnect's Official Exotel Service & Organised **Blood donation camps** in campus in collaboration with Raktarpan

EXTRA-CURRICULAR ACTIVITIES

<i>Social</i>	■ Mentored a group of 6 freshmens in development of a Research portal for professors to list projects 2019 ■ Guided a group of 8 students in designing of an Cross Platform App similar in features to SAP2000 2019 ■ Organised Blood donation camps in campus in collaboration with BloodConnect and Raktarpan 2018, 2019
<i>Sports</i>	■ Actively played Badminton as CPA in freshman year; Bagged 1 position in Badminton among all freshmen 2017 ■ Secured 1 position in Badminton at District level Twice; Participated in state level competitions 2014, 2015
<i>Cultural</i>	■ Participated in various Fine Arts events in GALAXY (an inter hall event of IIT Kanpur) 2017, 2018