



UDAYIN BISWAS



ACADEMIC DETAILS

Year	Degree / Board	Institute	GPA / Marks(%)
---	B.Tech and M.Tech in Computer Science & Engineering	Indian Institute of Technology, Delhi	7.231
2014	CBSE	DPS Vasant Kunj	95.8%
2012	CBSE	DPS Vasant Kunj	10/10

COURSES DONE

Calculus, Data Structures And Algorithms, Discrete Mathematical Structur, Digital Logic & System Design, Probability & Stochastic Pro., Computer Architecture, Principles Of Artificial Int., Computer Networks, Analysis & design Of Algorithms, Algebra, Programming Languages, Operating Systems, Intro To Automata & Th. Of Co., Logic For Computer Science, Cloud Computing Techno. Funda., Digital Image Analysis, Intro. To Database Mgmt. Syst., Machine Learning

SCHOLASTIC ACHIEVEMENTS

- **Olympiad:** Achieved **National Rank 81** in National Level Science Talent Search Examination by Unified Council, 2013.
- **KVPY:** Received **Fellowship** for qualifying Kishore Vaigyanik Protsahan Yojana conducted by IISc, Bangalore in 2013.
- **JSTSE:** Awarded Scholarship by **Delhi Government** for qualifying Junior Science Talent Search Examination in 2011.

INTERNSHIPS

- **Axtria India Pvt. Ltd., Gurgaon | R&D Team: Promotion Response Modelling** (May, 2018 - Jul 2018)
 - Identified the impact of promotional activity on physician prescribing behaviour.
 - Performed EDA and developed Python scripts to establish a **diminishing return model** for promotional channels.
 - Applied **mixed modelling** and ML algorithms to get base and channel contribution towards sales.
 - Derived the **Return on Investment** and the risk involved with each promotional channel.
- **HSBC Software Development, Pune : Backend services for Web application** (Jun, 2017 - Jul, 2017)
 - Provided backend services for a Spring Boot web application built using Spring framework.
 - Handled primarily **GET and POST requests** in the web application.
 - Provided **internal email service** using EWS Managed API and built simple responsive webpages applying Angular JS.
 - Connected the application to **SQL** database to **store and retrieve data** using JPA dependency.

PROJECTS

- **Blockchain in IoT (Prof.Rajeev Shorey)** (Jan, 2018 - May, 2018)
 - Investigated the impact of **integrating blockchain** with mesh IoT networks through discrete event network simulations.
 - Examined the influence of **varying block size** on IoT node memory and transaction processing time.
 - Performed scalability tests for **energy consumption** in the network, checked the satisfaction of IoT constraints.
- **Convolutional Neural Network for MNIST data classification (Prof.Parag Singla)** (Apr, 2018 - May, 2018)
 - Implemented CNN architecture using **Keras** library to classify data containing handwritten digits.
 - Experimented with **PCA and CNN design** to avoid overfitting and help improve test data accuracy.
- **MyBook Cloud Application (Prof.S.C. Gupta)** (Oct, 2017 - Nov, 2017)
 - Designed a **social web application** to follow people and get their content as live feed, similar to Facebook app.
 - Stored personal information, messages, videos and images using **NoSQL and Object Store** features of Azure platform.
- **AI Bot for TAK game (Prof. Mausam)** (Oct, 2016 - Nov, 2016)
 - Created a TAK player by implementing **minimax algorithm** and **Alpha-beta pruning** to improve search efficiency.
 - Developed an optimal **heuristic function** considering paths and stacks for the evaluation of board position.
- **Campus Traffic Monitoring (Prof. M. Balakrishnan)** (May, 2016 - Jul, 2016)
 - Monitored **in-campus vehicle speeds** and sent **warnings to violators** exceeding a certain speed limit.
 - Implemented a script to track residential violators and **send SMS warnings** via Arduino GSM shield.
 - **Displayed warnings** for non-residential violators on **LED display board** through serial communication.

TECHNICAL SKILLS

- Java, Python, C, C++, MATLAB (basic), OCaml, SML, R, VHDL, ARM Assembly
- HTML, CSS, Javascript (basic), SQL, Android Studio, Omnet++, Spring Boot

POSITIONS OF RESPONSIBILITY

- **Knowledge and Management Executive, Economics Club (Sep, 2015 - Sep, 2016)** : Helped organise the Tryst Event 'Economics Summit' in 2016 and manage digital publicity for the club.
- **Hostel Squash Captain, BSA (Apr, 2015 - Apr, 2016)** : Conducted regular training sessions throughout the year, responsible for managing the sports equipment and led the hostel team in Inter-Hostel Squash competition.