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BHAVUK JAIN

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Education

Degree/Exam	Institute	Year	CGPA
B.E. (Information Technology)	**Delhi University, Netaji Subhas Institute of Technology**	**2016**	**8.3/10**
C.B.S.E/XII	Ahlcon Public School, New Delhi	2012	92.2%
C.B.S.E/X	Bal Bharti Public School, Noida	2010	10/10

Academic Distinctions

- Undergraduate degree - **First class with distinction** and ranked in top 5% in Department.
- Merit based award of **full tuition fee waiver** for 3 academic years. 2013-16
- Merit based award of **half tuition fee waiver** during high school. 2010-12
- Award of **Merit Certificate** by CBSE both at Secondary and High School level.
- Successfully completed CS50x (edx) with **99.1 percentile.** 2013
- **99.68 Percentile** (Rank: 5076) in All India Engineering Entrance Examination (AIEEE) out of over a million candidates. 2012

Work Experience

Expedia Inc., India - Associate Software Developer **July'16 - Present**

- Associated with the Sphinx team dealing with development of a platform to enable migration of various services to the cloud environment (AWS).
- Role involves developing and managing seamless onboarding of various functional services.

Trainman - Machine Learning Engineer **Mar'15 - Jan'16**

- Developed a Web Scraper using Beautiful Soup in Python for confirming status and collecting attributes of randomly generated PNR Numbers from indianrail.gov.in.
- Evaluated several Machine Learning Algorithms (Logistic Regression, SVM, Random Forest) with different feature sets having comparable (eg: days before journey) and non comparable (eg: train number) attributes and finally developed a model using Logistic Regression having more than 50,000 features.
- With the increase in data, developed the idea of having multiple models specific to each train number which helped enhanced the accuracy from 78% to over 85%.

Publications

Research Project - 1: Mining Maximal Quasi Regular Patterns in Weighted Dynamic Networks **Nov'14 - Feb'15**

- Worked as part of the Data Mining and Research Lab, N.S.I.T under the guidance of Prof. Anand Gupta.
- Accepted in **Intl. Journal of Information Technology and Computer Science, 2015**.

Research Project - 2: Framework for mining regular patterns in dynamic networks **Aug'14 - Nov'14**

- Worked as part of the Data Mining and Research Lab, N.S.I.T under the guidance of Prof. Anand Gupta.
- Published by Inderscience Publishers in **Intl. Journal of Knowledge Engineering and Data Mining, 2015**.

Projects

Intent Parsing for Web Automation Tasks **Mar'17 - Nov'17**

- Built a natural language interface for frameworks such as IFTTT and Zapier to learn the intent behind complicated natural language commands.
- Successfully implemented integrations with over 200 services, with 83% accuracy in intent parsing.

Dynamic Recognition of Tangible Object Placement Codes **Sep'16 - Mar'17**

- Built a React Native App for detecting object placement codes used for tagging real world objects, much similar to QR Codes in real time using the dataset from Northwestern & Tufts HCI Lab.
- Implementation provided 99% recognition accuracy in real-time video with minimized latency.

Undergraduate Thesis: Conversion and Reconstruction of Compound Images to an Editable Form **Jan'16 - May'16**

- Worked on a project for developing a methodology to digitize documents containing various components (tables, text, images) and reconstruct them in an editable format without distortions.
- Used Tesseract OCR, lualatex library & OpenCV modules for various purposes including morphological operations.

Removing Noise from Dirty Documents using Machine Learning - Kaggle Problem **June'14 - Aug'14**

- Successfully implemented an algorithm to help remove noise such as coffee stains, wrinkles, etc. from documents using global thresholding with k-means, median filter and xgboost library.

Human Activity Recognition using Machine Learning **May'14 - June'14**

- Developed a model to analyse the data generated while using the devices like FitBit, Nike Fuelband to help predict the optimum manner of doing the physical exercise.
- Made use of Support Vector Machine and Random Forests Model while completing the project requirement of Intro to Data Analysis course on Coursera.

LANGUAGES AND SKILLS

- C, C++, Java, R, OpenCV, Spring, LaTeX, golang, Docker, Python.

EXTRA CURRICULAR ACTIVITIES /ACHIEVEMENTS

- Represented N.S.I.T as a part of an award winning delegation at Harvard National Model United Nations, 2014 in in Boston, U.S.A. **Feb'14**
- Vice-President of Finance and Economics Society of N.S.I.T. **Aug'14 - Jun'15**
- Executive Committee Member of Debating-Society of N.S.I.T. **Aug'14 - Jun'15**
- National level Table Tennis player.