Priyank PATHAK

PERSONAL DATA

DATE OF BIRTH:	27 May 1995
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EDUCATION

2013-PRESENT	Indian Institute of Technology B.Tech Electrical Engineering|Dual Major: Computer Science CPI: 8.4/10
2013	Sunbeam Bhagwanpur, Varanasi Central Board of Secondary Education SCORED: 93.8%
2011	St. John's School, DLW, Varanasi Indian Certificate of Secondary Education SCORED: 93.14%

MAJOR SCHOLASTIC ACHIEVEMENTS

- Received **Academic Excellence Award** for distinctive performance in the term **2013-14**
- Achieved **All India Rank (AIR) 1597** in **JEE'13** out of 1,50,000
- Secured **AIR 3457** in **AIEEE** , out of 1.6 million with 99.75 percentile score
- **Ranked 192** in **Kishore Vaigyanik Protsahan Yojana (KVPY)** in **2012-13**
- Awarded **Donor scholarship** for distinguished performance in academics, **2014-15**
- **Ranked 104 B.Tech and 6 B.Tech(Bio-Tech)** in **Uttar Pradesh State Entrance Exam 2013**
- Scored perfect **10 pointer**, awarded branch change from **Chemical Engineering** to **Electrical Engineering** and among the top 11 students to get **Dual Major in Computer Science**

RESEARCH INTERESTS

Data structures, Software engineering (developer), Networks, Image Processing, Compression algorithms

COMPUTER SKILLS

Programming Languages:	PHP, MYSQL, HTML, C, Java, python, AngularJs
Softwares Used:	Photoshop, Aftereffects, Premium Pro

RESEARCH PROJECT

Winter'14	**IIT KANPUR** *Image Processing* - Prepared case study of Surf technology to mark characteristic points and detection of object using image descriptors - Designed prototype algorithms for counting the number of object appearing in an image, irrespective of all orientation, size, overlapping etc *(Inventory Management)*
Summer'15	**IIT KANPUR** **Mentor : Prof. Bishakh Bhattacharya** *Defect detection on industrial pipe using smart sensors and Magnetic Flux Leakage* - Inspected and submitted a report on better alternatives to Hall Sensors for MFL, - Presented a in-depth case-study for Hall Sensor with respect to its circuit model and working, to efficiently detect magnetic flux leakage from a metal pipe - Categorized and characterized common industrial defects in an industrial pipe.

WORK EXPERIENCE

Summer'16 MAY-JUL	**Reliance Jio Cloud Computing** *Common Services and feature development*

- Designed UI for monitoring system logs using Django framework and Angular Js, with all query performance based on MySQL database.
- Prepared Proof of Concept for *eSign*, using government and Adobe implementation for legal binding and studied different implementation prevalent around the world.
- Coded with Java iText libraries for PDF signing involving multilevel CAs, cryptography, time stamps, CRLS, etc, all requisites for government authenticity
- Case study for generating authentic eSign for one time use and non-replication
- Developed activity tracker for monitoring all activities on Cloud drive, using python *(Django framework)* and Angular Js, involving self-written APIs
- Prepared case study for Druid Data Analytics. Set up Druid, Pivot and HDFS across different VMs and coordinated them.
- Experimented with different available UIs for query matching on Druid.

OTHER KEY ACADEMIC PROJECT

- **Network implementation through Cloud allocated Virtual Machines ****

  – Implementing as a part of current semester project, a portal responsible for managing lost and found properties information for local campus audience.

  – The project aims to integrate Social Media platform Facebook(via APIs) with domestic web mail service to update the Central MySQL database

- **NachOS implementation of OS ****

  – Implemented System calls to simulate normal OS functionality

  – Involved multiprocessing and multithreading through fork and clone, including Intercommunication

- **Implementation of verilog functionalities through Assembly Language** *(Computer Architecture)*

  – Implemented Quick Sort and other basic codes through assembly language

- **Designing and Implementing of Exam Scheduling Algorithm** *(Data Structures)*

  – Proposed and accepted as a winter project 2016, (upcoming winters) to design exam scheduling which shall be a function of number of students enrolled in all courses to minimize the number of students getting affected due to scheduling two exams in a single day

  ** - Ongoing semester

RELEVANT COURSES

NETWORKS**	OPERATING SYSTEM**
COMPUTER ARCHITECTURE	DATA STRUCTURE
ABSTRACT ALGEBRA**	COMMUNICATION SYSTEM
COMPUTING LABORATORY	COMPILERS*
CRYPTOGRAPHY*	ARTIFICIAL INTELLIGENCE*

** - Ongoing semester   * - Courses for next semester

POSITIONS OF RESPONSIBILITY

- **Student Guide and Academic Mentor, Counseling Service**

  – Mentored 6 freshmen and ensured their smooth induction into the campus, with their personal counseling for the next one year.

  – Conducted regular remedial classes for students facing problem in physics Electrodynamics

  – Provided academic assistance for whole junior batch along with one to one mentoring to academically deficient and probated students.

- **Electrical Engineering Association, Convener**

  – Managed all extra-curricular activities of Electrical Engineering, and event worth about net budget of 2 lakh rupees with a 3 tier team, in coordination with UGs, PGs and Professors.

- **Media and Publicity Senior Executive, Techkirti'15**

  – Managed media companies with their media deals, deliverable and entering in sponsorhip with them.

  – Designed the basic layout for posters and advertisements in deals with the sponsors.

    – Shot and edited videos for festival: look back, promo, teaser, theme reveal etc.

    – Appointed Head Coverage, single handedly managed Poets of the Fall Concert coverage arrangements, along with a team of photographers, responsible for coverage of all events on all 4 days of the festival.

Extra Curricular Activities

- **Active Sports person**, play squash and have attended sports camp for the same in summer'14

- **Photography Enthusiast**: Often involved in photographic trips and coverage of events at campus. **Won few of the Campus Photography Competitions** involving competition over 1K entries.

- **Freelance video maker, editor and cinematographer**, producing entertainment videos for campus. Youtube video registered with 10K+ views

- Earlier was a part of Alumni Contact Program with total +90 working hours in a month