ANUJ NAGPAL

3rd year Undergraduate
Department of Computer Science and Engineering
Indian Institute of Technology, Kanpur

Email: anujnag@cse.iitk.ac.in , anujnagpal96@gmail.com
Phone: +91-7755047730
Homepage: home.iitk.ac.in/~anujnag

EDUCATIONAL QUALIFICATIONS:

Year	Degree	Institute	CPI / %
2018 (expected)	Bachelor of Technology, Computer Science and Engineering	Indian Institute of Technology Kanpur	**9.4**/10
2014	AISSCE (Class XII - CBSE)	B. M. M. Sen. Sec. School ,Mandi Killianwali	96.2%
2012	AISSE (Class X - CBSE)	B. M. M. Sen. Sec. School, Mandi Killianwali	10/10

ACADEMIC ACHIEVEMENTS:

- Received **Academic Excellence Award** from IIT Kanpur for the Academic Session 2014-15.
- Secured an **All India Rank of 190** in JEE Advanced 2014 given by about 150,000 students.
- Secured an **All India Rank of 220** and **State Rank of 4 in Punjab** in JEE Main 2014 given by about 1,500,000 students.
- Conferred with **Kishore Vaigyanik Protsahan Yojana (KVPY)** Scholarship in 2012 by IISc Bangalore.
- Qualified National Standard Examination in Chemistry (**NSEC**) and National Standard Examination in Astronomy (**NSEA**) in 2013.

PROJECTS:

- **Joint Seat Allocation Algorithm for IITs, NITs, several IIITs and other GFTIs 2016**   *Dec '15 - Apr'16*
  (Mentor: Dr. Surendra Baswana, Department of Computer Science and Engineering, IIT Kanpur)
  - Implemented a Joint Seat Allocation algorithm complying with the business rules of JoSAA 2016.
  - Tested the algorithm on large input data sets of size 0.2-0.5 million candidates.
  - Improved time taken by algorithm by 70% times as compared to previous year software for some test cases.
- **Combinatorial Game Theory**   *Jul '15 – Nov '15*
  (Mentor: Dr. Rajat Mittal, Department of Computer Science and Engineering, IIT Kanpur)
  - Studied heuristics and basic techniques applicable in combinatorial games.
  - Analyzed strategies related to some classical combinatorial games like Nim, Hex, Domineering and Tic-Tac-Toe.

Ongoing PROJECTS:

- **NachOS Extension**   *-Ongoing*
  (Mentor: Dr. Mainak Chaudhuri, Department of Computer Science and Engineering, IIT Kanpur)
  - Involves extending the standard system call library and implementing process scheduling algorithms and page replacement algorithms for NachOS.
- **Playing Atari Games Using Deep Reinforcement Learning**   *-Ongoing*
  (Mentor: Dr. Piyush Rai, Department of Computer Science and Engineering, IIT Kanpur)
  - Involves implementing deep reinforcement learning algorithms for some Atari games and smartphone games.
- **Online Academic Registration Portal**   *-Ongoing*
  (Mentors: Dr. Piyush Kurur and Dr. Satyadev Nandakumar, Department of Computer Science and Engineering, IIT Kanpur)
  - Involves revamping the current online academic registration portal and making a new platform using Ruby on Rails.

POSITIONS OF RESPONSIBILITY:

- **UG Coordinator, ACA, Student Body of CSE Department, IIT Kanpur**   *Aug '16 – Current*
  - Involves organizing all the departmental activities ranging from hackathons to departmental farewell.
  - Facilitated smooth conduction of ACA summer school with around 300 registered students as a Secretary.
  - Organized departmental happy hours for promoting student-faculty interaction.
- **Secretary, Programming Club, IIT Kanpur**   *Apr '15 – Apr'16*
  - Assisted in making problems and test cases for institute level weekly programming contests.
  - Helped in organizing institute level programming club lectures and events.
- **Secretary, Animation Club, IIT Kanpur**   *Apr '15 – Apr'16*
  - Supported coordinators in conducting institute level workshops and hall level lectures.
  - Supervised conduction of animation club events in Spectrum – annual inter hall film club competition.
- **Senior Web Executive, Techkriti 2016**, **Annual Technical Festival of IIT Kanpur**
  - Assisted Web Head in developing and maintaining Techkriti 2016 official website.

RELEVANT COURSES:

- Machine Learning Techniques^
- Computing Laboratory - I
- Data Structures and Algorithms
- Probability and Statistics
- Computing Laboratory - II^
- Computer Organization
- Design and Analysis of Algorithms^
- Theory of Computation^
- Operating Systems^
- Fundamentals of Computing
- Discrete Mathematics
- Introduction to Economics

^ - Ongoing

TECHNICAL SKILLS:

- **Programming Languages**:
  C, C++, Python, C#, Bash, HTML, CSS, JavaScript, PHP, SQL, Verilog, Assembly
- **Software & Utilities**:
  GNU Octave, Git, LaTeX, Vim, Gnuplot, MATLAB, Autodesk 3ds Max, Adobe Photoshop, Unity 3D