Akash Kumar **Dutta**

SECOND YEAR UNDERGRADUATE · COMPUTER SCIENCE AND ENGINEERING

Indian Institute Of Technology Kanpur

☐ (+91) 70-5417-9587 | ✉ akashdut@iitk.ac.in | 🏠 home.iitk.ac.in\~akashdut | 🔗 AkashKrDutta | 💼 akash-kumar-dutta

Education

Indian Institute Of Technology Kanpur   *Kanpur, India*

BACHELOR OF TECHNOLOGY, MAJOR IN COMPUTER SCIENCE AND ENGINEERING   *2015 - 2019 (Expected)*

- Cumulative Grade Point/CGPA : **9.73/10**

Honors & Achievements

2016	**Academic Excellence Award**, Institute Rank-1, 1st Year	*IIT KANPUR*
2016	**Junior Research Associate**, Designated for project in Parallel Programming	*IIT KANPUR*
2015	**All Subject A stars (Exceptional Grade)**, Only Student to get A stars in all subjects in 1st sem	*IIT KANPUR*
2015	**All India Rank - 144**, Joint Entrance Exam Advanced, 1.5 million candidates	*India*
2015	**ISI Qualifier**, Qualified in Indian Statistical Institute (ISI) Examination	*Kolkata, India*
2015	**Merit Cerificate Awardee, Overall 95%**, Class 12 National Exam CBSE	*India*
2014	**KVPY Scholarship Awardee**, Indian Institute Of Science and Government Of India	*Bangalore,India*
2014	**International Mathematics Olympiad Rank-25**, Science Olympiad Foundation	*India*
2013	**Cumulative Grade Point Average CGPA- 10/10**, Central Board Of Secondary Education (CBSE)	*India*

Work Experience

Parallel Programming   *IIT Kanpur*

JUNIOR RESEARCH ASSOCIATE, PROF MAHINDRA AGARWAL   *May 2016 - July 2016*

- Implemented 3-Dimension Multigrid Solver for Poisson Equation in CUDA.
- Extensive parallel programming methods used for enhancing code performance.
- Optimization techniques and CUDA Libraries used.
- Code was an outline to be run on IIT Kanpur Supercomputer.

Projects

N-BODY Simulation in CUDA   *IIT KANPUR*

ACA (ASSOCIATION OF COMPUTER ACTIVITIES)   *Jan 2016 - April 2016*

- Demonstrates the path of a particle in multiple object gravity field systems using Parallel Programming.
- CUDA architecture is used together with Open CV to make the visual realisation.
- Much faster than serial code, implemented optimization techniques.

Positions Of Resposibility

Secretary   *IIT Kanpur*

PROGRAMMING CLUB   *April 2016 - PRESENT*

- Organized coding competitions and workshops in IIT Kanpur.
- Proposed projects for juniors based on our work experience.

Mathematics Mentor   *IIT Kanpur*

ACADEMIC MENTOR   *April 2016 - PRESENT*

- Positioned for students well aquainted with mathematics knowledge.
- To enhance the mathematics culture of college by guiding juniors in mathematics.

Student Guide   *IIT Kanpur*

COUNSELLING SERVICE   *April 2016 - PRESENT*

- Few senior students chosen as Student head are allotted to group of freshmen for guiding them.
- Helping freshmen get acquainted with the college system and culture.

Skills

Programming :	C, C++, CUDA C/C++, Python, Problem Solving.
Web :	HTML, CSS, Javscript, Bootstrap.
Operating Systems :	Ubuntu, Linux Mint, Windows.
Utilities :	LaTeX, Shell Scripting, CUDA, Git, GitHub.

Relevant Courses

- **Mathematics :** Real Analysis(A*), Linear Algebra & Single variable Calculus(A), Discrete Mathematics, Abstract Algebra(A), Logic.

- **Computer Science :** Fundamentals Of Computing(A*), Data Structures and Algorithms(*), Computer Organization(*), Computing Laboratory(*).

- **Others :** Introduction to Sociology(A*), Introduction to Economics(*).

A*: Exceptional Performance   *A: Excellent Performance*   *(*): Course in progress*

Miscellaneous

- Actively take part in Competitive Programming contests: Hackerrank-CodexGamer.

- Actively maintain my blogs at akashkrdutta.github.io