

Akash Kumar Dutta

SECOND YEAR UNDERGRADUATE · COMPUTER SCIENCE AND ENGINEERING

Indian Institute Of Technology Kanpur

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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	Institute Rank-1 , 1st Year	IIT KANPUR
2016	Designated Junior Research Associate , awarded for project in CUDA	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 , Indian Statistical Institute (ISI)	Kolkata, India
2015	Merit Certificate 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, much faster than serial code.
- Heavy parallel coding involved, 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

UNDERGRADUATE PROJECT, 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 was used together with Open CV to make the visual realisation.
- Much faster than serial code, implemented optimization techniques.

Positions Of Responsibility

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.
- Important for upholding the programming culture of college.

Mathematics Mentor

IIT Kanpur

ACADEMIC MENTOR

April 2016 - PRESENT

- Positioned for students well acquainted with mathematics knowledge.
- To enhance the mathematics culture of college by guiding juniors in mathematics.
- Helping the needy junior students to clear their doubts and help them in mathematics related matter.

Student Guide

COUNSELLING SERVICE

IIT Kanpur

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, Javascript, 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 and Architecture(*).
- **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.
- Actively maintain my blogs at akashkrdutta.github.io