Akash Kumar Dutta

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AkashKrDutta
Blogs at https://akashkrdutta.github.io
Hackerrank Profile : CodexGamer

Education

Institute	Board/Branch	Result	Duration
Indian Institute Of Technology, Kanpur	B.Tech, Computer Science and Engineering	**CPI 9.8/10**	2015-2019 (Exp.)
Jamshedpur Public School	Class 12 - CBSE (AISSCE)	**95%**	2015
Jamshedpur Public School	Class 10 - CBSE	**CGPA 10/10**	2013

Honours And Achievements

Scholastic Achievements

- **Student Research Associate** at IIT Kanpur, designated for project in **Parallel Programming** during May-July 2016
- **Exceptional Performance** (A^* grade) in all courses in 1^{st} Semester with a total of 9 A^* in all the courses till now
- **Academic Excellence Award** 2015-2016 for meritorious academic performance in IIT Kanpur
- Secured **AIR 144** in JEE Advanced 2015 among **1.5 lakh** candidates.
- Secured **AIR 97** in Kishore Vaigyanik Protsahan Yojana (KVPY) conducted by IISc Bangalore and attended **Vijyoshi camp** at IISER Kolkata

Programming Contests

- Secured **Rank 72** in Goldman Sachs Quantify 2016: Real life problems in competitive programming
- Secured **Rank 84** in Ad Infinitum18, a two-day Mathematical programming contest among 4060 participants on Hackerrank
- Secured **Rank 82** in 101 Hack 50, a 3 hours algorithmic contest among 2687 participants on Hackerrank

Work Experience

Deployment Of Distributed Graylog Service And Bench-marking Databases

Software Developer Intern, JUSPAY *May-July 2017*

- Used **Kubernetes** to deploy **parallel, scalable and stateful** nodes in **GCE** and **AWS** of Graylog Service consisting of ElasticSearch and Mongo DB at backend
- **Cluster management** and **API connections** for the Graylog and ElasticSearch Stateful Sets and Mongo DB Replica Set
- **Bench-marked Databases** focusing on Online Transactional use cases (OLTP) : Influx DB vs Timescale DB and Timescale DB vs PostgreSQL (specifically based on pg_partman)

Poisson Equation Solver

Student Research Associate *May-July 2016*
Supervisor: Professor Mahindra Verma

- Implemented **3-Dimension Multigrid Solver** for Poisson Equation using **Parallel Programming techniques in CUDA**
- Used **Thrust CUDA Library** and implemented Jacobi Iterator method for solving the Poisson Equation

Projects And Hackathons

N-Body Simulation

Association Of Computer Activities (ACA) *Jan-May 2016*

- Simulated the path of particles in multiple object gravity field systems using **Parallel Programming in CUDA**
- Used **Open CV** with CUDA to make the particle simulation

Microsoft Code.Fun.Do *2015*

- Developed a universal app in **Visual Studio :** "Experience" in which people can share any of their travel and technological experiences

Google Hackathon *2016*

- Used **Unity** to make a game "RocknRoll"

Technical Strengths

Computer Languages : C/C++, CUDA, Python, C#
Skills : Competitive Programming, Cluster Management, Web Development, Shell Scripting
Tools : Kubernetes, Docker, Git, LaTeX, Vim, Unity, R
Platforms : Ubuntu, Linux Mint, Windows

Relevant Coursework

Computer : Computer Networks*, Operating Systems*, Theory Of Computation*, Data Structure and Algorithm, Computer Organization, Discrete Maths, Computer Logic
Mathematics : Probability and Statistics, Abstract Algebra
*: Ongoing Courses

Campus Activities

Programming Club : Secretary 2016-2017
ACA : Mentor for Particle Simulation Project 2017
CS : Maths Academic Mentor and Student Guide 2016-2017