Saksham Sharma

http://acehack.org sakshams@(cse.)iitk.ac.in

EDUCATION

Indian Institute of - Technology Kanpur
B.Tech in Computer Science and Engineering
2014-Present | CPI: 10.0/10.0

D.A.V. Public School
Senior Secondary Grade 12
Overall: 97.6%

LINKS

Github:// **sakshamsharma**
LinkedIn:// **saksham-sharma**

COURSEWORK

Data Structures and Algorithms (A*)
Computer Organization (A*)
Introduction to Programming (A*)
Tools for Computing (A*)
Computer Systems Security (A)
Discrete Mathematics (A)
Abstract Algebra (A)
Logic in Computer Science (A)
Probability and Statistics (A)
(A* grade for exceptional performance)

SKILLS

Programming Languages
C/C++ • Scala • Python • Haskell •
Java • Lisp • x86 Assembly

Web Development
Node.js (with Express.js) •
JavaScript • TypeScript • Angular
•Scala (with Akka)

Operating Systems
Gentoo Linux • Arch Linux •
Ubuntu • Microsoft Windows

Utilities
Emacs and Vim both • Git • GDB •
Shell Utilities in Linux • LaTeX

Platforms
Windows Phone, Kinect, Arduino

INTERESTS

Computer Systems Security
Programming Languages and
Approximation
Open Source
Functional Programming
Web Development
Linux system administration
Capture the Flag contests

AWARDS AND ACHIEVEMENTS

2014-16	**Institute Rank 1**, IIT Kanpur (CPI 10.0/10.0 in all 4 Semesters)
2014	**All India Rank 10**, JEE Mains, among 1.5 million candidates
2014	**All India Rank 138**, JEE Advanced, among 150,000 candidates
2015	Academic Excellence Award IIT Kanpur
2014	Aditya Birla Group Scholarship awardee
2014	Kishore Vaigyanik Protsahan Yojana (KVPY) Scholarship awardee
2010	National Talent Search (NTS) Scholarship awardee

EXPERIENCE AND PROJECTS

Research Fellow | May'16-July'16
Max Planck Institute for Software Systems, Germany
- Developed and evaluated tool (in Scala) to rewrite mathematical expressions to lower floating point errors
- Obtained successful results, improving expressions by 50%, tested on expressions taken from various research papers and other sources
- Part of a larger tool being developed to optimize numerical programs

Development Intern | May'15 - July'15
under DoFA IIT Kanpur, Prof. Manindra Agarwal
- Was adjudged as one of the best interns while being a freshman
- Worked on a large scale polyglot web application with an extensive technology stack, in a team setup, comprising of code reviews etc
- Continue volunteering code, as a full-stack developer; managing the search part; and work on the backend, frontend and infra

Coordinator Programming Club | Apr'16 - Present
- Rewrote, deployed and populated Programming Club website pclub.in
- Helped organize the Science and Technology Council Summer Camp '16
- Previously as a *Secretary*, Organized Freshers' Programming Contest, Linux install fest, and conducted beginner programming workshops

ABU Robocon IITK Team Member '15 | Under Dr. Bhaskardas Gupta
- Worked on making 2 semi-autonomous robots capable of playing badminton on a full size court
- Image-processing to track, predict shuttle. Arduino and Odroid for control
- Used stereo-vision, and later Microsoft Kinect for depth data
- Finished 11th among 85 participating teams on a National Level

Microsoft code.fun.do winning team member Twice, IIT Kanpur
- Developed PlotIt, a graph-plotting app to parse and plot implicit mathematical functions as graphs. Platform: Windows Phone
- Made a front end to an open source program simulation code using JS
- National *5th* in finals round Coding milestone. Made platform to learn programming; app in *C#*, backend for program running in *node.js*.

Software Corner Manager Techkriti 2016, IIT Kanpur
- Made a new esoteric programming language for a national competition
- Made online judge for a National High Performance Computing competition, hosted on CDAC's Param Yuva II Supercomputers

MISCELLANEOUS

- Blog about Linux, programming etc at acehack.org
- Contribute often to Open Source (Github), have many personal projects
- Attended a full paper-reading seminar-like course on Approximate Computing during Summer '16 at the Max Planck Institute
- Administer servers in IIT Kanpur; deploying, automating services
- A *Linux enthusiast*, tinker around with my Linux box in free time
- Various research talks, seminars and guest lectures attended in Germany