

Saksham Sharma

<http://acehack.org> [sakshams@\(cse.\)iitk.ac.in](mailto:sakshams@(cse.)iitk.ac.in)

EDUCATION

IIT KANPUR

B.TECH IN COMPUTER SCIENCE
AND ENGINEERING
2014-Present | CPI: 10.0/10.0

D.A.V. PUBLIC SCHOOL, ASR
SENIOR SECONDARY GRADE 12
Overall: 97.6%

LINKS

Github:// [sakshamsharma](#)
LinkedIn:// [saksham-sharma](#)

COURSEWORK

Data Structures, 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

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 • LaTeX •
Linux Shell Utilities • Git •
Docker • Kubernetes • GDB
• ElasticSearch

INTERESTS

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

AWARDS AND ACHIEVEMENTS

2014-16 Institute Rank 1, IIT Kanpur (CPI 10.0/10.0 in 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 KVPY Scholarship (IISc) 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 increase accuracy using a genetic algorithm
- Obtained successful results, improving expression error by 50%, useful for scientific and embedded applications
- Part of a larger tool being developed to optimize numerical programs

FULL STACK WEB DEVELOPER | May'15 - Present

Internship under DoFA IIT Kanpur, Prof. Manindra Agarwal

- Was adjudged as one of the best interns while being a freshman
- Implemented various features in a large scale polyglot web application with an extensive technology stack, in a team setup
- Continue volunteering code, as a full-stack developer; managing the search component in Node.js and Scala

COORDINATOR Programming Club | Apr'16 - Present

- Rewrote, deployed, populated club website pclub.in
- Previously as a *Secretary*, Organized Freshers' Programming Contest, Linux install fest, conducted programming workshops

SOFTWARE CORNER MANAGER Techkriti 2016, IIT Kanpur

- Made an esoteric language for a national competition
- Made online judge for a High Performance Computing contest

ABU ROBOCON IITK TEAM MEMBER '15 | Dr. Bhaskardas Gupta

- Worked on 2 semi-autonomous full-size badminton playing bots
- Image-processing, Stereo Vision and Kinect to track and predict shuttle path
- Finished 11th among 85 participating teams on a National Level

MICROSOFT CODE.FUN.DO Winning Team Member Twice

- Developed an app to parse expressions and plot implicit mathematical function graphs
- Made frontend to a program simulation backend in JS
- National 5th in Finals round Coding milestone. Made a platform to learn programming

MISCELLANEOUS

- BLOG about Linux, programming etc at acehack.org
- Contribute sporadically to OPEN SOURCE (Github)
- Microsoft BUILD THE SHIELD, qualified first round, National 10th in the onsite round on offensive, defensive hacking
- Read, studied a fair share of COMPUTER SECURITY related papers and material; credited a graduate course at IIT Kanpur
- Attended a full paper-reading seminar on APPROXIMATE COMPUTING, research talks and lectures at the Max Planck Institute
- ADMINISTER various servers in IIT Kanpur; deploying and automating services for the junta