Prannay Khosla *July 13, 1997*

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First Year Undergraduate, IIT Kanpur
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Education

Indian Institute of Technology, Kanpur — Kanpur, Uttar Pradesh, India
Bachelor of Technology, Electrical Engineering — *July, 2015 – May, 2019 (Expected)*
Cummulative Grade Point Average 10.0/10.0
Institute Rank - 1(Out of 850 students)

Delhi Public School, R.K. Puram — New Delhi, India
All India Senior School Certificate Examination (AISSCE) — *2015*
- Cummulative 96.6 percent (Percentile 99.74)
- National Top 1 percent in Mathematics (100 percent) and Computer Science (98 percent).

Class 10 Board Certification — *2013*
- Cummulative Grade Point Average 9.8/10.0

Academic and Co-curricular Acheivements

All India Rank 548 in JEE Advanced 2015 among 150,000 students
All India Rank 192 in JEE Mains 2015 among 1,500,000 students (Percentile 99.97)
Awarded Gold Medal in 2014 for academic excellence for 7 consecutive years
Kishore Vaigyanik Protsahan Yojana fellow since year 2013, Deptt. of Science and Technology, Govt. of India. Secured All India Rank 408 in qualifying examination organized by IISc Bangalore
National Standard Examination, Physics Qualified for second stage (INPhO) in year 2014 and ranked in the top 1 percent of all appearing candidates.

Technical Skills

Programming Languages C/C++ (Expert), Haskell (Beginner), Java (Proficient), Python (Proficient)
Web/App Development LESS,Jade,Node.JS (Express),Yesod,AngularJS,MongoDB,Visual Studio
Technical Tools/Platforms OpenCV, OpenCL, TensorFlow,EC2,RobotOS,Emacs,MATLAB/Octave
Operating Systems Arch Linux, Linux AMI, OSX, Windows, Ubuntu
Platforms RaspberryPi,Odroid,Arduino,Amazon EC2,Github

Projects

Autonomous Underwater Vehicle — November, 2015 - Present
Supervisor: Prof. K.S. Venkatesh — *Electrical Engineering Deptt., IIT Kanpur*
- Aimed at moving the Bot along a line, firing torpedos at given targets and grabbing and dropping objects underwater
- Implemented using OpenCV for Image Processing and ROS for Controls
- Seperated low-level actuation from higher logical level processing
- Efficient application of AI algorithms at higher level processing to ensure Autonomous actuation.
- Unit testing using Client nodes at each logical level
- Goal callback checks at every point using data from sensors for seamless motion

Functional Programming Project — January, 2016 - Present
Supervisor: Prof. Sunil E. Simon — *CSE Deptt., IIT Kanpur*
- Creating an efficient Online Judge for Programs written in C/C++/Haskell
- The judge was implemented from scratch.
- Applied filters to allow only safe code(for C/C++ programs)
- Judge is deployed using Yesod, a Haskell based Web Framework
- Using functional programming to create a Bot for solved games such as TicTacToe or Connect4

Miscellaneous

Head of Web Development at ExunClan the High School Computer Science enthusiast's Club.
- Maintained the school and club's websites and blogs.
- Undertook the upgradation of the entire event management system of the school to a web based application with PHP on backend running on EC2 instance.
- Also organized (for 2 consecutive years) the online cryptic hunt, Sudocrypt which attracted over 3500 participants at high school level from more than 6 countries.