# **Bhupendra Kastore**

Junior Undergraduate

Dept. of Computer Science and Engineering

Indian Institute of Technology, Kanpur, India

E-mail: <a href="mailto:bhupkas[AT]iitk.ac.in">bhupkas[AT]iitk.ac.in</a>, <a href="mailto:bhupkas[AT]iitk.ac.in">bkjblpur[AT]gmail.com</a>

238, Hall 2

IIT Kanpur-208016

Phone: + (91) 9005832119

## **EDUCATION**

Year	Degree	Institution	Performance
2015	B.T, Computer Science and Engineering	IIT Kanpur	8.0/10.0*
2011	Class 12 : CBSE Board	KV 2 GCF, Jabalpur	88.8%
2009	Class 10 : CBSE Board	KV 2 GCF, Jabalpur	91.6%

<sup>\*</sup>after completion of 4 semesters

#### **INTERESTS**

- Algorithms and Data Structures.
- Web Development.
- Algorithmic Programming Contests.

#### SCHOLASTIC ACHIEVEMENTS

- Achieved an All India Rank (AIR) 210 in IIT-JEE'11 in which nearly 5Lac students appeared.
- Secured AIR 17 Rank (State Topper) in AIEEE'11 in which nearly 11Lac students appeared.
- My team secured 2<sup>nd</sup> prize at XCEED'13 (optimization problem contest), organized by Kurukshetra'13, Anna University.
- My team came 2<sup>nd</sup> in Instant (Algorithmic programming contest), organized by Teachkriti'13, IIT Kanpur.
- Secured AIR 18 in 13th National Science Olympiad.
- Secured AIR 54 in 12th National Science Olympiad.
- Secured AIR 65 in 10th National Cyber Olympiad.
- Secured AIR 155 in 9th National Cyber Olympiad.
- Secured AIR 558 in 10th National Science Olympiad.
- Secured AIR 32 in KV JMO, class 10<sup>th</sup>.
- Secured International Rank 147 in 4th International Mathematics Olympiad.

# **ONLINE HANDLES**

Topcoder: bhupkasCodeforces: bhupkasCodechef: bhupkasSpoj: bhupkas

## **KEY ACADEMIC PROJECTS**

## **Smallest Enclosing Circle**

(May-July 2013)

#### (Mentor: Prof. S. Baswana, IIT Kanpur)

- Implemented the existing randomized algorithm for finding the smallest enclosing circle of given points in a plane.
- Analyzed the algorithm experimentally, and proved the average linear time complexity of the algorithm experimentally.
- Designed online applets which shows how the algorithm works.

Jigsaw Puzzle (Spring 2013)

## (Course Project, Computing Laboratory)

- · Designed Jigsaw Puzzle, in which user can drag the pieces and put them in their correct places to win the game.
- Algorithm was implemented in python and the GUI was provided using Pygame.

Computer Architecture (Spring 2013)

# (Course Project, Introduction to Computer Organisation)

- Developed a computer architecture which can run a basic object code.
- The architecture supports basic operations such as addition, jumping, looping.

Card Game 29 (May-June 2012)

#### (Under Programming Club, IIT Kanpur)

- Developed a computer version of the card game 29, which provides a user-friendly interface to play the cards.
- Used elementary Artificial Intelligence algorithms.
- Provided GUI using wxPython.

Genetic Programming (Spring 2012)

#### (Under Association of Computing Activities, IIT Kanpur)

- Implemented a genetic algorithm to solve the Brachhistochrone Problem.
- Took random sample and genetically improve them, till we get an almost optimal solution.

#### **RELEVANT COURSES**

- Operating Systems\*
- Computer Networks\*
- Theory of Computation\*
- · Randomized Algorithm\*
- Fundamentals of Computing
- Data Structures and Algorithms
- Discrete Mathematics
- Intro. to Computer Organization
- Introduction to Mathematical Logic
- Probability and Statistics
- Computing Laboratory

<sup>\*</sup>to be completed in July-November'13

TECHNICAL SKILLS		
Programming Languages	C, C++, Python, Verilog	
Web	HTML,CSS, JavaScript, PHP,mysql	
Platforms	Windows, Linux	
Tools	Latex, Beamer, Make, Shell, GNU Octave, wxPython, PYgame	

# POSITIONS OF RESPONSIBILITY

- Student Guide, Counseling Service, IIT Kanpur for academic year 2012-13
  - o Mentored 6 freshmen students and assisted them in getting familiar to the college environment.
  - o Assisted in the successful organization of the orientation programme for the benefit of around 880 students in IIT Kanpur.
- Senior Web Executive, Techkriti'13, IIT Kanpur.
  - o Contributed in designing and developing the main website for the Annual Technical Festival of IIT Kanpur, Techkriti'13.
- Assistant Coordinator, Software Corner, Techkriti'13, IIT Kanpur.
  - o Managed various events under Software Corner.
  - o Contributed in designing the problem statements for the events.