

Sunil Pandey

Computer Science & Engineering | Mathematics
Indian Institute of Technology Kanpur

EDUCATION

- 2014–Now **Bachelor of Science**
Computer Science | Mathematics
CGPA: 9.3/10.0
- 2014 **Grade XII, CBSE**
Percentage: 94.6%
- 2012 **Grade X, CBSE**
CGPA: 10.0/10.0

WORK EXPERIENCE

Summer Analyst, Goldman Sachs

Compliance Division, Bangalore May-Jul'18

- Employed machine learning techniques for extracting topic tags for a document
- Pre-processed firm data to get the significant content of the document employing parsing techniques
- Implemented various probabilistic approaches like LDA, HDP & CTM to generate topic vectors
- Implemented Map-Reduce Jobs on Apache Hadoop framework to deal with large scale of dataset
- Developed a UI using apache tomcat server displaying tags to given text representing its context

Research Intern, New York University

under Dr. Yao Wang, NYU May-July'17

- Implemented different baseline model employing tensorflow, numpy library to predict the saliency and user view in 360 degree video
- Worked on the implementation of LSTM & CNN to design a model for user view prediction
- Obtained less than 10% error in view prediction

RTE Internship, IIT Kanpur-UT Dallas

under Dr. Ovidiu Daescu, UTD May-July'16

- Worked on finding two edge disjoint spanning trees in a graph with $2n-2$ vertices
- Studied Robert Tarjan's research paper; proved lemma for allocation of edges of 2-4 degree vertices
- Proposed an algorithm reducing the edges to less than n , a step towards linear time algorithm

LEADERSHIP ROLES

Council Head

Mar'18 - Present

Science and Technology Council

- Leading a team of 51 coordinators and executives, managing affairs of 11 clubs and 8 institute teams
- Guided and managed strict timeline in organizing Takneek'18 with 40 events across two weeks
- Represented IIT Kanpur at Pan-IIT Tech Meet Board meeting for drafting meet's constitution

Contingent Leader

Jan'18

6th Inter IIT Tech Meet, IIT Madras

- Led 40 member team participating in 10 diff. events
- Bagged one gold, two silver and one bronze medal
- Exhibited 14+ projects; Initiated collaboration with DRDO, Govt. of India for soldier support event



sunilkp442@gmail.com

kpsunil.github.io

(+91)-775-504-8062

AWARDS AND ACHIEVEMENTS

- Now **Department Rank 1**
among 51 students
- 2016 **Academic Excellence Award**
IIT Kanpur, 2015 and 2016
- 2014 **All India Rank 1031**
JEE Advanced, 150,000 candidates
- 2013 **KVPY Scholarship awardee**
Scholarship by IISc, Govt. of India
- 2016 **Shortlisted, Interview Round**
Honda-YES Award (10/41 students)
- 2010 **State Rank1, Olympiad Rank 10**
International Olympiad, Mathematics

PROJECTS

GOGO-MIPS Compiler for Golang

Under Dr. Subhajit Roy, IIT Kanpur

- Implemented a fully functional GoLang to MIPS compiler using gocc compiler toolkit in GoLang
- Incorporated multiple return values, nested loops, defer, struct among other features
- Exercised efficient register allocation policy along with other low level optimizations

Visual Question Answer

Under Dr. Harish Karnick, IIT Kanpur

- Experimented with multiple learning models to predict the answers of questions based on images
- Implemented Answer Type Prediction based, Question guided Attention, Knowledge based models
- Proposed a Joint Embedding approach with Image guided Attention on Question

Vehicle Recognition

Under Dr. Gaurav Pandey, IIT Kanpur

- Developed framework for registration and detection of vehicles using template matching
- Employed OpenCV library, learning models & pattern matching to get high accuracy OCR results

Web Development, IITK-NYC Office

under Dr. Manindra Agarwal, IIT Kanpur

- Implemented local cache to store values which haven't been sent to server using Angular2 framework
- Contributed towards integrating backend API calls to display comments on frontend

COURSEWORK / TECHNICAL SKILLS

- Algorithms II A • Numerical Computations A*
- Compiler Design A • Probability&Statistics A
- Theory of Computation A • Data Structures A
- Machine Learning A • Operating System B
- Computer Networks A • Linear Algebra A
- LANGS C/C++, Go, Java, Python
- UTILS OpenCV, Git, Angular, MySQL
- OS Linux, Windows