

Prateek Chanda

Portfolio

prateekkol21@gmail.com | +91-8337055526

EDUCATION

IIST SHIBPUR

B.TECH IN COMPUTER SCIENCE

Expected Jul 2019 | Howrah, India

GPA: 8.8/10

SOUTH POINT HIGH SCHOOL

Grad. May 2015 | Kolkata, India

LINKS

Github: [prateekiiest](#)

LinkedIn: [prateekchanda](#)

Twitter: [@prateekiiest](#)

Quora: [Prateek-Chanda](#)

Medium: [Prateek-Chanda](#)

COURSEWORK

UNDERGRADUATE

Data Structures and Algorithms

Operating Systems

Data Mining

Discrete Structures

Computer Graphics

Computer Networks

Database Management

SKILLS

PROGRAMMING

Python • Java • JavaScript • Matlab

AngularJs • Django • SQL

Ruby • R • Node.js •

C • C++ • CSS • PHP

SOCIETIES

Community Member of NumFocus

FOSSASIA Developers Group

Google Developers Group Kolkata

University Open Source Head

GitHub Campus Expert - Profile

TEDx IIST Shibpur - Core Member

CONFERENCES

ATTENDED

Speaker - Kharagpur Open Source Society

Google Developers Solve for India

FOSSASIA Open Tech

GitHub Field Day

RISE 2017 Conference, Hong Kong

EXPERIENCE

LINUX FOUNDATION - OPENDAYLIGHT

SOFTWARE DEVELOPER INTERN

Jul 2018 – Present

- Designed an automated Jenkins support for building jobs in Maven through a bot service affecting over 80% of Opendaylight projects.
- Updated documentation structure and work-flow along with with bug fixes related to about 60-65% for various project releases.

FREE OPEN SOURCE SOFTWARE ASIA - SUSI.AI

SOFTWARE DEVELOPER INTERN | PROJECT LINK

Jun 2018 – Sept 2018

- Worked with around 126 developers under the biggest open source community of Asia to develop an artificial intelligence chatbot system.
- Designed new prototype for SUSI Smart Speaker Application with improvements in text to speech modules in Python, user interface using Node.js and development of new APIs.

MACHINE INTELLIGENCE UNIT, INDIAN STATISTICAL INSTITUTE

MACHINE LEARNING RESEARCH FELLOW | KOLKATA, INDIA

May 2018 – August 2018

- Conducted theoretical analysis on different Metric Learning algorithms to learn similarity metric from data distribution on the basis of clustering internal measures.
- Implemented a novel algorithm with a 6.5% increase in improved convergence accuracy and better optimization as opposed to traditional methods. Publication in progress

APACHE OPEN CLIMATE WORKBENCH

STUDENT DEVELOPER | NASA OPEN SOURCE SOFTWARE

Apr 2018 – May 2018

- Implemented new metrics for better climate model evaluation purpose, accompanied with unit tests.
- Resolved high priority issues for package uploading in PyPi and dependency failures, reducing around 60% of the release block items

COMPLEX NETWORK RESEARCH GROUP, IIT KHARAGPUR

RESEARCH INTERN | STUDENT GROUP ACTIVITY RECOGNITION

May 2017 – Jun 2017 | Kharagpur, India

- Designed classification models that can predict student group formation and group dynamics using mobile sensor data like wifi location, accelerometer values and voice levels with an accuracy of 88.9%.

SUNPY, OPENASTRONOMY

STUDENT DEVELOPER | NASA OPEN SOURCE SOFTWARE

Dec 2016 – Apr 2018

- Worked in a team of 60 research scholars and scientists from NASA, UCL and Stanford on developing the solar physics software called SunPy.
- Implemented new features to analyze regions of high solar intensities from solar plot and new image processing algorithms to capture solar flares from solar plots with an accuracy of 83.3%
- Got acknowledged along with researchers at NASA Goddard Space Flight Center for outstanding contributions to the project. - Software Releases

MINOR PROJECTS

codeIIEST/Algorithms
Algorithms/Python
Algorithm Self-Projects
BoltLabs/Bolt
apache/beam
Popular Movies
Project Mockup to Article
Animal Trading Cards

MENTORSHIPS

HacktoberFest
Kharagpur Winter of Code - IIT Kgp
24PullRequests
1 Million Women to Tech
Women in Technology

VOLUNTEERING

Event Manager - TEDxIIEST Shibpur
Student Mentor - Code.org
DRI Research Head - Stanford Scholar
GeeksforGeeks Campus Ambassador

CERTIFICATIONS

Python for Research - Harvard University
Programmatic SQL Objects - Microsoft
Cloud Computing - Microsoft
Machine Learning Nanodegree - Udacity
Machine Learning Intro - Coursera
Software Engineering - Coursera
Operating Systems - Udacity

RELEVANT LINKS

My Open Source Journey - Medium
Open Source Contributions - Wiki

MAJOR PROJECTS

SHELLIX - UNIX IMPLEMENTATION OF SHELL

PROJECT LINK

Designed a robust implementation of shell for Unix based systems with all common features supported under bash with an improved user interface.

SOLAR DATA ANALYSIS SYSTEM

PROJECT LINK

Implemented a solar data retrieval system to collect solar data from various solar observatories based on date and time and analyze different helio-features from the data over time.

CONGESTION REDUCED ROUTING IN WDM NETWORKS

ACADEMIC PROJECT LINK

Designed a new probability based routing algorithm in WDM optical networks to reduce congestion of links and ensure fast and secure data transfer operations. Publication

DOCUMENT TOPIC MODELLING

ACADEMIC PROJECT

Designed a new dynamic graph clustering algorithm in python based on importance factor of nodes in a graph with improved clustering accuracy compared to traditional methods.

CODE SLEEP PYTHON

PROJECT LINK

Worked on building a curated list of simple sub-projects using python ranging from games, core machine learning applications and desktop applications using python, django. Led a team of 60 open source contributors and mentored them to build the whole project over 6 months period.

NETWORKING APPLICATIONS

PROJECT LINK

Implemented simple server client communication chat system based on the concepts of network layer applications.

PREDICTING PASSENGER SURVIVAL RATE IN TITANIC DISASTER

PROJECT LINK

Built decision functions using through regression that attempt to predict survival outcomes from the 1912 Titanic disaster based on each passenger's features, such as gender and age.

PUBLICATIONS

- 2018 Graph Based Approach to Document Topic Modelling - ICCCNT 2018
- 2018 Predicting Passenger Survival Rates on the Titanic - DOI
- 2018 Predicting User Group Activity Using Mobile Sensors - DOI
- 2017 SunPy Research Publications at Google Scholar and Zenodo
- 2016 Congestion Reduced Routing in WDM Network - DOI

ACHIEVEMENTS

- 2018 Recipient of Google India Challenge Scholarship
- 2018 Selected among a pool of applicants for internship at Inria, France
- 2017 Recipient of Microsoft Research India Scholarship - IIT Kharagpur
- 2017 Awarded RISE Conference grant within top 1000 Open Source Developers
- 2015 within top 10% of applicants in All India Engineering Entrance Exam
- 2012 Among top 100 students in Science Olympiad Foundation (SOF) in state
- 2012 Among top 100 students in International Mathematics Olympiad in state