Pronoy Barua

http://pronoy-barua.github.io/
pronoy.barua25@gmail.com

EDUCATION

BITS PILANI, GOA CAMPUS
M.Eng in Computer Science
Grad. Aug 2018 | Goa, India
Cum. GPA: 8.095 / 10.0

IMS ENGINEERING COLLEGE
B.Tech in Computer Science
Grad. Jun 2015 | Uttar Pradesh, India
Cum. GPA: 64.1%

SOMERVILLE SCHOOL
XII (Science) - CBSE | 68.6%
Grad. May 2010| Noida, India

X - CBSE | 83.8%
Grad. May 2008| Noida, India

LINKS

Github:// pronoy-barua
LinkedIn:// pronoybarua
Twitter:// @pronoy_93

COURSEWORK

GRADUATE
Distributed Data Systems
Parallel Computing
Cloud Computing
Advanced Data Mining
Real Time Systems

UNDERGRADUATE
Operating Systems
Computer Networks
Digital Image Processing
Machine Learning
Database Systems

SKILLS

PROGRAMMING
Over 2000 lines:
C++ • Python • JavaScript • Shell
MATLAB • LaTeX
Familiar:
MongoDB • Django • MySQL • Node.js
OpenCV • OpenCL • scikit-learn
Tools:
Docker • Vagrant • Ansible • git
jQuery • RabbitMQ • D3.js

EXPERIENCE

QUALCOMM | Software Engineer
Jul 2018 - Present | Hyderabad, India
- Responsible for building and maintaining video firmware for HEVC decoder.

QUALCOMM | Software Engineering Intern
Jan 2018 - Jun 2018 | Hyderabad, India
- Built a solution to detect camera tampering for surveillance cameras. Learned about parallel programming in OpenCL.
- Optimized Image Quality Post Processing Tool for multi-core machines.
- Researched ways to detect compression artifacts in videos. Developed prototypes of various solutions.

BITS PILANI | Software Engineer (Web)
Jan 2017 – Apr 2017 | Goa, India
- Developed the front-end and back-end for the new SWD (Student Welfare Division) website for college.
- Maintained the old SWD website.

XTAGE TECHNOLOGIES | Software Engineering Intern
Jun 2015 – Jul 2015 | Noida, India
- Built a system to rank brands based on the occurrence of their logos in social media images. Responsible for research and prototyping. Explored computer vision algorithms for object detection.
- Developed the front-end and back-end for data collection and report generation for Oxfam, India, an international NGO.

PROJECTS

Extraction of Selected Text from Scanned Documents
Sep 2014 – Mar 2015 | IMS Eng. College
Designed a system to perform OCR on selected regions of image.Learned about various digital image processing and machine learning techniques.

Batch Job Executor
Oct 2016 | BITS Pilani, Goa Campus
Designed a batch job executor in C which executed commands from a file sequentially. The goal of the project was to improve understanding of processes. Added support for pipes and redirection.

Distributed Clustering Algorithm
Feb 2017 - Apr 2017 | BITS Pilani, Goa Campus
Implemented a parallel version of the k-means clustering algorithm. Theoretical and empirical analysis of the algorithm was conducted.

AWARDS

| 2015 | 5th | Project presentation at inaugural ACM chapter, IMSEC |
| 2012 | 1st | Technical presentation on HTML5, IMSEC |

EXTRA CURRICULAR ACTIVITIES

| 2010 | Runner-up | District Level Junior Football Championship |
| 2009 | 2nd | Inter-School Western Music Competition - Lead Pianist/Keyboardist |