

Pronoy Barua

<https://pronoy-barua.github.io/>
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EDUCATION

BITS PILANI, GOA CAMPUS

M.ENG IN COMPUTER SCIENCE

Expected Jun 2018 | Goa, India

Cum. GPA: 7.39 / 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 ENGINEERING INTERN

Jan 2018 – Present | 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