

Ayush Sharma

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EDUCATION

IIT GUWAHATI

BTECH IN MATHEMATICS & COMPUTING

Expected May 2019 | Guwahati, India
Cum. GPA: 8.59 / 10.0 (Current)

BHAVAN'S VIDYASHRAM

HIGH SCHOOL

May 2015 | Jaipur, India
Percentage: 91.40% | CBSE

LINKS

Github:// AShar97

LinkedIn:// ayushsharma97

COURSEWORK

UNDERGRADUATE

Monte Carlo Simulation
Probability Theory & Random Processes
Financial Engineering - Introduction
Linear Algebra
Discrete Mathematics
Data Structures & Algorithms + Practicum
Game Theory & Economics
Scientific Computing + Practicum
Stochastic Calculus for Finance
Operating Systems + Practicum
Optimization *
Financial Engineering + Practicum *
Formal Languages & Automata Theory *
Databases + Practicum *
Computer Networks + Practicum *
MOOC (taken adjunct to curriculum):

{Certifications}

- Machine Learning (Coursera)
- Deep Learning (Coursera) *
- Advanced Machine Learning (Coursera) *

* To be completed in Spring 2018

SKILLS

PROGRAMMING

C/C++ • Python

STATISTICAL TOOLS

R • MATLAB *

MISCELLANEOUS

LaTeX • Arduino * • Microsoft Office

OPERATING SYSTEMS

Windows • Unix (macOS) • Linux

* Elementary Proficiency

PROJECTS

GENERALIZED EXPONENTIAL DISTRIBUTION

EXTENDED VERSION | ACADEMIC PROJECT

April 2017 | Prof. Arabin Dey

- Implemented a random number generator for an extended version of the generalized exponential distribution in both uni-variate and bi-variate cases.
- Technology used: R.

COLLECTIVE ROBOTICS | ROBOTICS CLUB, IIT GUWAHATI

November 2016 - April 2017

- Worked with project team to implement a modified version of Particle Swarm Optimization algorithm, for the collaborative searching mechanism, to achieve rendezvous task by the cumulative effort of multiple autonomous robots, functioning independently and without communicating with one another.
- Technology used: Python and Arduino.

TOY-LANGUAGE INTERPRETER | ACADEMIC PROJECT

April 2017 | Prof. Kalpesh Kapoor

- Implemented an Interpreter for a toy procedural programming language.
- Technology used: Python.

ACHIEVEMENTS

INSTITUTE MERIT SCHOLARSHIP

Awarded Institute Merit Scholarship for securing 1st position in the U.G. batch of 2019 (strength 50) of Department of Mathematics, in the academic session 2015-2016.

JOINT ENTRANCE EXAMINATION 2015

Secured position in the top 0.3% among 1.35 million candidates in the test, required for admissions to IITs.

KVPY 2014-15

Obtained (qualified for) the National Program for Fellowship in Basic Sciences (for high school students) by securing a position in the top 1% among 50,000 candidates.

NTSE 2010-11

Obtained (qualified for) the National Talent Search Scholarship by securing a position in top 1,000 candidates.

EXTRACURRICULARS

INTRA-BATCH SPORTS COMPETITION

Secured 3rd position in the table-tennis event.

COMMUNITY SERVICE

Tutored high school students, from under-privileged background, in Physical Sciences and Mathematics, on weekends during academic session 2016-17.

FRESHMEN MENTORSHIP

Mentoring freshmen under Peer Mentoring Programme of Students Welfare Board, IIT Guwahati, during academic session 2017-18.