

Diptesh MAJUMDAR

diptesh.majumdar@gmail.com | (412) 499-4835 | [dipteshm](https://www.linkedin.com/in/dipteshm) | kripontech.com

EDUCATION

Carnegie Mellon University, Pittsburgh, PA, USA

MAY 2018

Master of Science in Electrical & Computer Engineering | GPA: 3.56/4.00

- Courses: Distributed Systems, Computer Architecture & Systems, Storage Systems, Embedded Real-time Systems
- [Funded](#) research at [PDL](#) on memory performance optimization using program semantics; published in [ISCA'18](#)

Indian Institute of Technology Guwahati, Guwahati, AS, India

JUNE 2015

Master of Technology in Computer Science & Engineering | GPA: 9.16/10

- Courses: Computer Systems, Speech Processing, Randomized Algorithms, Computational Systems Biology
- Won [DAAD scholarship](#) to conduct research at TU Munich, Germany as an exchange student for 2 semesters
- Thesis on Design of a Reconfigurable Communication Middleware for FlexRay-based ECUs; published in [RTCSA'15](#)

West Bengal University of Technology, Kolkata, WB, India

JULY 2013

Bachelor of Technology in Computer Science & Engineering | GPA: 8.93/10

- Courses: Operating System, Computer Network, Software Engineering, Data Structure & Algorithms
- Thesis on Detection & Diagnosis of Rust Disease in Wheat Leaves using ANN; published in [WCI'15](#) and [FICTA'14](#)

INDUSTRY EXPERIENCE

Microsoft

PITTSBURGH, PA, USA

Senior Software Engineer

OCT 2020 - PRESENT

- Developing [Azure Stack Hub Storage services](#) for on-premise, fully local and offline-capable, cloud deployments
- Developed cache volumes for [Azure Container Storage enabled by Arc](#) - Azure's caching solution for edge devices
- Developed token manager - a critical distributed file-system service that maintains cache-consistency
- Implemented ONC RPC, NFS & SMB protocols for [HPC cache](#) - Azure's caching solution for HPC applications

Oracle Corporation

NASHUA, NH, USA

Member of Technical Staff

JUNE 2018 - OCT 2020

- Developed [Exascale Direct Volumes](#), a block storage solution for Oracle Database software and data files
- Designed IOCTL handlers in Linux kernel for volume management operations such as snapshot and resize
- Designed HA volume metadata management for [Exascale](#) using async upcalls and RPC-based frameworks

Tata Research Development & Design Center

PUNE, MH, INDIA

Systems Engineer in Research Unit of Tata Consultancy Services Ltd.

AUG. 2015-APRIL 2016

- Trained in formal verification and validation using model checking
- Initiated research on [a polynomial-time approach to estimate worst-case execution times of embedded apps](#)

ACADEMIC AWARDS AND HONORS

Membership in IEEE - Eta Kappa Nu (Sigma Chapter)	Nov. 2017
Inducted into student honor society of IEEE for being in the top one-third of Masters' students in ECE at CMU.	
Graduate Research Assistantship, Carnegie Mellon University	MAY 2017
Received USD 10,800 for conducting research in computer architecture at Parallel Data Lab in CMU.	
IEEE Technological Innovation Award from IEEE Kolkata Section	DEC. 2015
Received INR 5,000 for writing the best graduate thesis of the year in CS from Eastern Zone of India.	
IIT-MS Scholarship from German Academic Exchange Service (DAAD)	SEPT. 2014
Received EUR 5,516 & the opportunity to complete Master's Thesis in seven months at TU Munich, Germany.	
Ministry of Human Resource & Development Scholarship	JUL. 2013
Received INR 2,97,600 from Government of India for pursuing M.Tech at IIT Guwahati, India.	
Graduate Aptitude Test in Engineering (GATE) - All-India Graduate Entrance Examination	MAR. 2013
Ranked 241 out of 224,000 applicants, i.e. among top 0.1%, in "Computer Science & Information Technology" paper.	
Merit-based Undergraduate Scholarship from St. Thomas' College, Kolkata	JUL. 2012
Received a tuition fee waiver in final year for maintaining a CGPA above 8/10 during the first three years.	
Graduate Teaching & Research Assistantship, Virginia Tech Graduate School	FEB. 2016
Awarded USD 1,850 per month for PhD admission in Electrical & Computer Engineering, declined to attend CMU.	
Graduate Student Assistantship, UNC-Chapel Hill Graduate School	FEB. 2016
Awarded USD 28,620 per annum for PhD admission in Computer Science, declined to attend CMU.	
Research Scholarship, National University of Singapore	FEB. 2015
Awarded SGD 2,000 per month for PhD admission in School of Computing, declined to work at Tata Research.	
Japanese Government (MEXT) Scholarship, University of Tokyo	FEB. 2015
Awarded JPY 145,000 per month for 1.5 years of research in comp biology, declined to work at Tata Research.	

TEACHING EXPERIENCE

Indian Institute of Technology Guwahati	GUWAHATI, INDIA
Teaching Assistant at Dept. of Computer Science & Engineering	JUL. 2013- SEPT. 2014
<ul style="list-style-type: none">• Systems Software Laboratory (Autumn 2014): Taught basics of Linux system administration during Lab-sessions.• Computing Laboratory (Spring 2014): Taught basics of C-programming and Linux bash commands.• Computational Geometry (Autumn 2013): Prepared Lecture Slides on data structures for NPTEL.	

Responsible Charity	KOLKATA, INDIA
Volunteer Teacher	JUN. 2016- Nov. 2016
<ul style="list-style-type: none">• Taught English, Mathematics and Science to underprivileged kids from slums in and around Kolkata.• Trained children in Chess, Chinese Checkers, Uno, Rummikub, Connect Four and Triominoes	

NON-ACADEMIC INTERESTS

- Maintain my personal finance management tools: [kripon.com/fixed-income](#) and [kripon.com/stocks](#)
- Rated 1600+, and higher than 96th percentile, across all chess formats on [chess.com](#)

Last updated on January 11, 2026