

## Fahim Tahmid Chowdhury

---

CONTACT INFORMATION	1819 W Pensacola St Apt#C-2 Tallahassee FL 32304	Cell: (+1) 786-406-2617 Skype: fahim.tahmid.chowdhury E-mail: <a href="mailto:ftc17@my.fsu.edu">ftc17@my.fsu.edu</a> LinkedIn: <a href="http://www.linkedin.com/in/fahimtahmidchowdhury">www.linkedin.com/in/fahimtahmidchowdhury</a> Website: <a href="https://fahimcsebuett.github.io/website/">https://fahimcsebuett.github.io/website/</a>
OBJECTIVE	To satisfy my thirst for innovation and add values to the society while building up my career in research assisted by my engineering acumen	
CURRENT EMPLOYER	<b>Department of Computer Science, Florida State University</b> , Tallahassee, Florida <b>Graduate Research Assistant</b> <b>August, 2017 - Till Date</b> Working in <b>Computer Architecture and Systems Research Lab (CASTL)</b> under the supervision of <b>Professor Dr. Weikuan Yu</b>	
RESEARCH INTERESTS	<ul style="list-style-type: none"><li>• <b>Computer Architecture:</b> File Systems and Storage, I/O Acceleration, Operating Systems</li><li>• <b>Artificial Intelligence:</b> Machine Learning, Convolutional Neural Networks and Deep Learning</li><li>• <b>Theoretical Computer Science:</b> Graph Theory, Drawing and Visualization</li></ul>	
EDUCATION	<b>Florida State University</b> , Tallahassee, Florida PhD, <b>Computer Science</b> , Currently studying, <b>CGPA 4.00/4.00</b> <b>Bangladesh University of Engineering and Technology</b> , Dhaka, Bangladesh Bachelor of Science, <b>Computer Science and Engineering</b> , February 2013, <b>CGPA 3.54/4.00</b> <b>Notre Dame College</b> , Dhaka, Bangladesh Higher Secondary Certificate(HSC), Science, 2007, <b>GPA 5.00/5.00</b> <b>Ispahani Public School and College</b> , Chittagong, Bangladesh Secondary School Certificate(SSC), Science, 2005, <b>GPA 5.00/5.00</b>	
RESEARCH EXPERIENCE	<b>National Energy Research Scientific Computing Center (NERSC)</b> , Lawrence Berkeley National Laboratory (LBNL), Berkeley, California <b>Student Assistant</b> <b>May, 2018 - August, 2018</b> Worked as a summer intern in the <b>Data Analytics and Services</b> group at NERSC on a project for analyzing scalable data pipeline for distributed deep learning <b>NERSC, LBNL</b> , Berkeley, California <b>LBNL Affiliate</b> <b>August, 2018 - Till Date</b> Continuing the summer internship project on distributed deep learning applications' data pipeline	
RESEARCH PROJECTS	<ul style="list-style-type: none"><li>• <b>Scalable Data Pipeline for Distributed Deep Learning:</b> Working on a <b>project</b> with <b>NERSC</b> for profiling I/O in the distributed deep learning applications to explore the I/O bottlenecks, and design and implement an optimization strategy to overcome the possible bottlenecks</li><li>• <b>BeeGFS Performance Evaluation:</b> Serving a collaboration project with <b>LLNL</b> for evaluating the performance of <b>BeeGFS</b> parallel cluster file system using different benchmark tools (e.g. DD, IOZone and IOR)</li><li>• <b>Burst Buffer File System:</b> Working on a collaboration project with <b>Lawrence Livermore National Laboratory (LLNL)</b> for improving the performance of a burst-buffer file system (i.e. <b>UnifyCR</b>) by enhancing the garbage collection process</li><li>• <b>Study on LBANN:</b> Studying on <b>Livermore Big Artificial Neural Network (LBANN)</b></li><li>• <b>Specialized File System for Large Datasets of Deep Neural Network:</b> Assisting a collaboration project with <b>LLNL</b> for designing a file system for large datasets of Deep Neural Network by studying the data shuffling mechanism in TensorFlow and Caffe</li></ul>	
ACADEMIC PROJECTS	<ul style="list-style-type: none"><li>• <b>CSE Office Management:</b> An integrated system for automating all the official tasks(<i>i.e. Inventory management, Notice board, Teachers' profile, Peer-to-peer communication etc.</i>) of BUET CSE</li><li>• <b>Network Text Editor:</b> A C++ application to facilitating collaborative editing in a LAN</li></ul>	

	<ul style="list-style-type: none"> <li>• <b>Automated Water Faucet:</b> A portable hardware device that can be put on any water tape to control the flow of water automatically by detecting human presence using PIR sensor for avoiding wastage</li> <li>• <b>Digital Watch with Timer:</b> A digital watch with timer developed using ATMEGA 8 Microcontroller</li> <li>• <b>LAN Messenger:</b> A software developed in Java for chatting with the contacts that are in a LAN</li> <li>• <b>NACHOS:</b> Not Another Completely Heuristic Operating System implementation developed in C++</li> <li>• <b>Snooker Game:</b> A two player Snooker game developed in C++</li> <li>• <b>Screensaver:</b> A simple screensaver developed in Assembly Language</li> </ul>
UNDERGRADUATE THESIS	<b>Design of a Surveillance System for Dhaka City</b> , <i>Graph Drawing and Information Visualization Lab</i> , CSE, BUET under the supervision of <i>Dr. Md. Saidur Rahman</i>
ACADEMIC ACHIEVEMENTS	<ul style="list-style-type: none"> <li>• Champion in the Intra-Department Project Competition for the project <i>CSE Office Management</i></li> <li>• Board Merit Scholarship, HSC Examination</li> <li>• Board Merit Scholarship, SSC Examination</li> </ul>
INDUSTRY EXPERIENCE	<p><b>IPvision Canada Inc</b>, Dhaka, Bangladesh  <b>Software Analyst</b> <span style="float: right;"><b>October, 2016 - July, 2017</b></span>          Worked as a member of the development team for developing the SDK of the social networking platform named <i>ringID</i></p> <p><b>Vizrt</b>, Dhaka, Bangladesh  <b>Software Engineer</b> <span style="float: right;"><b>July, 2014 - September, 2016</b></span>          Served as a member of the <i>Sports Solutions</i> R&amp;D team in Dhaka, mostly worked on <i>Viz Libero</i> software</p> <p><b>Enosis Solutions</b>, Dhaka, Bangladesh  <b>Software Engineer</b> <span style="float: right;"><b>February, 2013 - June, 2014</b></span>          Worked as a member of the development team for <i>Visual-Host</i> which is an offshore SDK framework of a Computer Aided Engineering(CAE) software <i>Visual-Environment</i></p>
TECHNICAL SKILLS	<ul style="list-style-type: none"> <li>- Programming Languages: C/C++, Python, C#, Matlab, Java, Javascript, Prolog</li> <li>- API Libraries: HDF5, BSD sockets, WinSock, Opengl, Boost, Windows API</li> <li>- Frameworks: TensorFlow, Caffe, Horovod, Qt Framework, MFC, .NET Framework, Google Test</li> <li>- Distributed File Systems: BurstFS, UnifyCR, BeeGFS, Lustre, Octopus</li> <li>- I/O Benchmark Tools: IOR, DD, IOZone, Bonnie++</li> <li>- Profiling Tools: Darshan, TensorFlow Timeline</li> <li>- Database Management Systems: MySQL, Oracle, Web SQL, SQL Server</li> <li>- Design Tools: EDraw, GraphViz, Rational Rose</li> <li>- Documentation Tools: L<sup>A</sup>T<sub>E</sub>X, Doxygen</li> <li>- Project Management Applications: Jira, Redmine, Mantis, Microsoft Project</li> <li>- Version Control Systems: Git, Mercurial, SVN</li> <li>- Operating Systems: Unix/Linux, Windows</li> </ul>
COMMUNITY WORK	<p><b>Engineering Students' Association of Bangladesh</b>  <i>A common platform for all the engineering students of Bangladesh</i>  <b>President</b> <span style="float: right;"><b>October, 2011 - November, 2013</b></span>  <i>Pioneered</i> the voluntary association along with a bunch of energetic people and served as the organizational head</p>
VOLUNTARY PROJECTS	<ul style="list-style-type: none"> <li>• <b>Gaming Application for Differently Abled Children:</b> A car racing game interfaced with cycling machine for encouraging the <i>Active Range Of Motion Exercise (AROME)</i> for the children having weakness in <i>Quadriceps femoris muscle</i> being conducted in <i>Feroza Bari Disabled Children Hospital</i></li> <li>• <b>Software for ReCAP:</b> A software for prioritizing the roads and highways by simulating an algorithm that is developed by <i>Department of Urban and Regional Planning</i>, BUET</li> </ul>