**Md Tanvirul Islam**

76 Preston Street, Windsor, CT 06095

(860) 459-2366 | [md.t.islam@uconn.edu](mailto:md.t.islam@uconn.edu)

EDUCATION **University of Connecticut**

*Bachelor of Science in Engineering,* May 2019

Double Major: Computer Science and Engineering, Electrical Engineering

GPA: 3.6 / 4.0

**Relevant Courses:** Algorithms and Complexity, Data Structures, Systems Programming, C++ Essentials, Object Oriented Programming, Operating Systems, Advance Computer Organization and Architecture, Liner Algebra, Microprocessor Applications Lab, Systems Analysis, Signals and Systems, Digital Integrated Circuits, Theory of Computation, Probabilistic Performance Analysis, Digital Systems Design

TECHNICAL • Languages: Java, C, C++, Python, MIPS Assembly Language

SKILLS • Web: HTML, CSS, JavaScript, TCP/IP Sockets

• Hardware Programming: AVR, Arduino, VHDL

• Applications: MATLAB, Git, OrCAD PSPICE, LogicWorks, SimpleScalar, Microsoft Office Suite

• Operating Systems: Linux Ubuntu, Windows, Macintosh OS

WORK **University of Connecticut School of Fine Arts** Storrs, CT

EXPERIENCE *Technology Specialist* September 2017 - Present

• Develop and maintain UConn SFA and Benton Museum websites using HTML, CSS, JS, WordPress

• Provide IT support to exhibitions, classrooms, and faculties to ensure a reliable technical platform

**The Travelers Companies: OAI-sys Voice and Multimedia Technologies** Hartford, CT

*Summer IT Intern* June 2017 - August 2017

• Collaborated with a motivated team to implement RedSky E911 to send precise locations on 911 calls

• Updated project database and automated monthly call-data collection processes to increase efficiency

**The Travelers Companies: PI Application Development** Hartford, CT

*Summer IT Intern* June 2016 - August 2016

• Created a web-repository to store the information and documentations of all Web Services used in PI

• Used SoapUI to perform automated data-driven tests on Web Services to ensure proper functioning

RESEARCH **University of Connecticut Department of Computer Science and Engineering** Storrs, CT

EXPERIENCE *Software Defined Radio and Ad hoc Wireless Networks* January 2018 - Present

Working under Dr. Song Han and Dr. Shengli Zhou on setting up Ad hoc wireless network using Software Defined Radio (SDR) platform. Programming GNURadio to implement signal processing blocks in SDR, and using Python an C languages to modify the signal-block functions provided in the library and to write customized MAC layer. Using the NI-USRP unit as the Hardware Transceiver for the SDR platform.

**University of Connecticut Department of Electrical and Computer Engineering** Storrs, CT

*Superlattice Structures as Buffer Layers for Semiconductor Devices* September 2016 - Present

Collaborated with Dr. John Ayers to extend his research on Electric Circuit Model for Strained Layer Epitaxy. Used the circuit model function to model and simulate different test-case structures of chirped and unchirped superlattices to study better performing buffer layers for metamorphic semiconductor devices. Extensively used MATLAB to code the simulations for the superlattice structures.

PUBLICATIONS **Islam M.**, Chen, X., Khujofsa, T., J. Ayers, “Chirped Superlattices as Adjustable Strain Platform for Metamorphic Semiconductor Devices”. *IJHSES CMOC 2017 (Submitted and under review)*

POSTER **MIT IEEE Undergraduate Research Technology Conference, MIT** 2017

PRESENTATIONS *Comparison of Chirped and Unchirped Superlattices as Buffers for InGaAs/GaAs Devices*

**Connecticut Symposium of Optoelectronics and Microelectronics (CMOC)** 2017

*Chirped Superlattices as Adjustable Strain Platform for Metamorphic Semiconductor Devices*

HONORS AND **Best undergraduate research poster** at the CT Symposium of Micro and Optoelectronics 2017

AWARDS **University of Connecticut Engineering Scholarship** recipient 2016

**Honor Society for Electrical and Computer Engineers** at University of Connecticut 2016

**Governor’s Academic Incentive Award** for academic excellence 2015

**Dean’s List** for outstanding grades 2014 - 2015