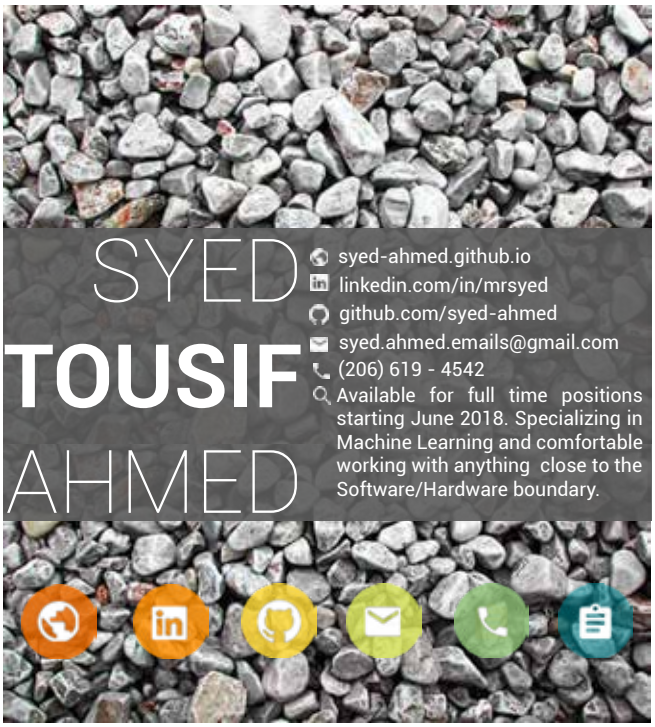

SYED TOUSIF AHMED

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(206) 619 - 4542

Available for full time positions starting June 2018. Specializing in Machine Learning and comfortable working with anything close to the Software/Hardware boundary.

EDUCATION

Rochester Institute of Technology, Rochester, NY
BS in Computer Engineering
Minor: Mathematics
Expected Graduation Date: May 2018

COURSES

Computer Science I & II, Applied Programming in C,
Digital Systems Design I & II, Assembly Programming,
Machine Intelligence, Deep Learning,
Operating Systems, Reconfigurable Computing (FPGA)
Combinatorial Game Theory, Numerical Analysis
Circuits I & II, Electronics I

SKILLS

PROGRAMMING LANGUAGES

Proficient with: C/C++, Python, Java, VHDL, ARM Assembly
Familiar with: SystemVerilog, PHP, JavaScript, Swift, MySQL, C#, Matlab, HTML, CSS

SOFTWARE AND DEVELOPMENT TOOLS

Proficient with: Tensorflow, Caffe2, Android Studio, Git, Docker, CVS, Unity3D, XCode
Familiar with: CUDA, OpenGL, OpenCV, Cadence OrCAD, PSpice, Xilinx Vivado, Multisim, Torch, Caffe, PyTorch, React

OPERATING SYSTEMS

Proficient with: Linux, Mac OS, Windows

HARDWARE

Proficient with: Oscilloscope, Function Generator, Multimeter, Spectrum Analyzer, Breadboard, Soldering
Familiar with: Xilinx Nexys4 DDR FPGA Board, Beaglebone Black, Raspberry Pi, NVIDIA Jetson TX2

HONORS

NSF I-Corps Funding Recipient
Nominated for RIT Outstanding International Student Award 2015
RIT International Scholarship

RESEARCH/ PUBLICATIONS

One Shot Learning for Acoustic Recognition - Western New York Image and Signal Processing Workshop 2016

User Experiences When Testing a Messaging App for Communication Between Individuals who are Hearing and Deaf or Hard of Hearing - ACM ASSETS 2017

Using Automatic Speech Recognition to Facilitate Communication Between an Individual who is Hearing and One who is Deaf or Hard of Hearing - ACM ASSETS 2017

EXPERIENCE

RESEARCH ASSISTANT
Center on Access Technology, NTID, RIT | Rochester, NY
September 2016 - May 2017; August 2017 - Present

- Develop research tools for Deaf/Hard of Hearing Access Technology research projects - Speech/Video to Text etc.
- Technologies used: Android Development, Node.js, TensorFlow

DEEP LEARNING SOFTWARE INTERN
NVIDIA Corporation | DL Frameworks Team | Santa Clara, CA
May 2017 - August 2017

- Designed and implemented Universal Framework Format (UFF) Converters for TensorFlow and Caffe2, released in TensorRT 3.0
- Wrote Sequence to Sequence Framework for Caffe2 and made kernel optimizations
- Technologies used: C++, Python, Protobuf, CUDA, Caffe2, TensorFlow

RESEARCH ASSISTANT
FETLab, GCCIS, RIT | Rochester, NY
September 2015 - December 2015; August 2016 - May 2017

- Built an automatic speech recognition system that classifies sounds of actions on everyday objects. Research domain: Human Computer Interaction and Ubiquitous Computing
- Technologies used: Python, Tensorflow, Android, Scikit-Learn

DEEP LEARNING ENGINEERING INTERN
NextDroid (Startup) | Boston, MA
June 2016 - August 2016

- Wrote neural network models for road image segmentation for a semi-autonomous/self-driving car
- Wrote image segmentation web interface for mass data collection that decreased data collection cost by 60%
- Technologies used: Caffe, Tensorflow, Torch, CUDA, NVIDIA Jetson TX1, NVIDIA DRIVE PX, Python, C++, Lua

COMPUTER VISION DEVELOPER (Co-op)
Ahold USA | Quincy, MA
January 2016 - May 2016

- Used tensorflow and caffe to do transfer learning for product package recognition
- Developed an augmented reality iOS app that gives a location-aware shopping experience

COMPUTER VISION RESEARCH ASSISTANT
Discover Lab, School of Media Sciences, RIT | Rochester, NY
June 2015 - December 2015

- Developed, debugged, and optimized an augmented reality app, called RocreadAR for a research project aiming at integrating different media for publishing and communication.
- Technologies used: OpenGL, OpenCV, Unity3D, Vuforia SDK, Wikitude SDK, Git, Android, iOS, Google Glass

PROJECTS

OMEN: AN OPEN SOURCE HARDWARE/SOFTWARE CO-DESIGN FRAMEWORK FOR DEVELOPING HARDWARE ACCELERATORS FOR MACHINE INTELLIGENCE (in progress)
Writing Systolic/Wavefront Architecture in VHDL for RNNs
Writing Device API to support Deep Learning Frameworks in FPGA

REAL TIME AMERICAN SIGN LANGUAGE VIDEO CAPTIONING
Access at GTC 2017: www.goo.gl/2f3ZyQ
Implemented Sequence to Sequence Neural Network for translating American Sign Language video to text. Presented at GPU Tech Conference 2017.

OPEN SOURCE CONTRIBUTIONS IN DEEP LEARNING RESEARCH
Caffe2 - Solved several bugs in Seq2Seq. Commit #35dc34
TensorFlow - Solved bug in Android Demo. Issue #1371
TensorFlow - Implement Max Unpooling Op - Issue #2169
elab/Torch7-profiling -Solved bug-Commit #7fdb7af and #0e64c08
elab/ENet-Training - Improved code - Pull request #9

ARESUME
Access at Google Play Store: www.goo.gl/RNB2Tx
An Augmented Reality android app that gives an interactive resume reviewing experience. Made using Unity3D, Vuforia SDK, and Android Studio. Point your phone at the top-left corner of this

CLICK WARS - RIT IOS APP CHALLENGE HACKATHON 2015
Access at: www.goo.gl/4qX6sA
A game based app called "Click-Wars" that uses face detection and bluetooth to connect multiple players to play a game of who can click each others face faster.