

Sharjeel Khan

✉ smkhan@gatech.edu | 🌐 Sharjeel-Khan | in sharjeel-khan | 🌐 www.smkhan.me | 📞 +1 (404) 436-2321 |
📍 Klaus Advanced Computing Building 2337, Atlanta, Georgia 30332

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY

PHD IN COMPUTER SCIENCE
Aug 2018 - Present
Advisor: Dr. Santosh Pande

CARNEGIE MELLON UNIVERSITY

BS IN COMPUTER SCIENCE
Aug 2013 - May 2017
Minor in Mathematical Sciences
University Honors
Dean's List (5 semesters)

SKILLS

PROGRAMMING LANGUAGES

Python, C++, Java, OCaml,
SML, Javascript, C, \LaTeX

FRAMEWORKS/ TOOLS

LLVM, Coq, Twelf, Celf, Django,
AngularJS, Bootstrap, Git

LIBRARIES

Tensorflow, D3, PeerJS, jQuery

HONORS

UNDERGRADUATE TEACHING IN COMPUTER SCIENCE APPRECIATION AWARD

UNIVERSITY
May 2017

SENIOR STUDENT LEADERSHIP AWARD

UNIVERSITY
May 2017

EAA AWARD FOR HUMANITARIAN TECHNOLOGY

CARNEGIEAPPS HACKATHON
Jan 2017

UNDERGRADUATE TEACHING IN COMPUTER SCIENCE APPRECIATION AWARD

UNIVERSITY
May 2015

EXPERIENCE

GRADUATE RESEARCH ASSISTANT

GEORGIA INSTITUTE OF TECHNOLOGY
August 2018 – Present | Atlanta, Georgia

- Working with Santosh Pande on using machine learning and deep learning algorithms for program analysis
- Predicting intraprocedural program paths using decision trees
- Predicting call chain using sequence to sequence model
- Detecting and mitigating side-channel attacks during runtime

RESEARCH ASSISTANT

CARNEGIE MELLON UNIVERSITY
May 2017 – July 2018 | Doha, Qatar

- Worked on Meta-CLF project with Iliano Cervesato and Giselle Reis to build an automated tool for verifying concurrent, distributed and parallel properties.
- Formalized Automated Trading Systems (ATS) in Celf, a concurrent logical framework (CLF)
- Proved properties about the formalization of ATS like no crossed/locked market
- Developed the meta-theory for CLF to verify proofs in Celf

UNDERGRADUATE TEACHING ASSISTANT

CARNEGIE MELLON UNIVERSITY
June 2014 – May 2017 | Doha, Qatar

- Worked as an Undergraduate Teaching Assistant for 7 distinct courses
- Tutored and helped students with material and concepts taught in the class during my office hours
- Graded written homeworks and created the autograder for the coding assignments

SOFTWARE ENGINEERING INTERN

MEDDY
Jan 2017 – April 2017 | Doha, Qatar

- Moved Transaction Emails from Django's personal email system to Mandrill
- Created the dashboard to show Google analytics and Django analytics to clinic managers for them to track their doctors
- Worked on the interface for clinics to send bulk SMS messages to their clients

PUBLICATION

FORMALIZATION OF AUTOMATED TRADING SYSTEMS IN CONCURRENT LINEAR FRAMEWORK (CLF)

LINEARITY AND TLLA WORKSHOP
July 2018 | Oxford, United Kingdom

PROJECTS

KESA

Mar 2016 – Aug 2016 | Doha, Qatar

- Built a web application to allow users to create and read stories with branching storylines
- Created using Django and AngularJS with D3 for visualization and tree structures and PeerJS for collaborative sessions.