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# Rushi Shah

## Education

Ongoing Harvard Law School, J.D.

Ongoing **Princeton University**, Ph.D. Computer Science (Center for Information Technology Policy)

May 2020 University of Texas - Austin, B.S. Computer Science & B.S. Mathematics (Turing Scholar)

May 2016 Thomas Jefferson High School for Science and Technology (TJHSST)

## Work Experience

#### Summer UT Program Analysis Research Group, Research Assistant, Austin

2019 • Presented paper called "Synthesizing Database Programs for Schema Refactoring" (third author) at top-tier Programming Languages Design & Implementation (PLDI) conference

• Implemented prototype tool in Java programming language for paper called "Data Migration using Datalog Program Synthesis" (second author) in top-tier Very Large DataBases (VLDB) conference

#### Spring CS 389L Automated Logical Reasoning (graduate level class), Teaching Assistant

2019 • Served as Teaching Assistant for 60 Master's and Ph.D. students; graded weekly proof-based homeworks; held well-attended weekly office hours; helped grade midterm and final exam

#### Summer Amazon, Software Engineering Intern, Tokyo, Japan

2018 • Elegantly reduced the task of tracking real-time, location-based purchase trends in Amazon order data to leverage an edge-detection algorithm (a traditional machine vision technique)

• Implemented a service based on above approach using the Java programming language, the Python programming language, the OpenCV library, and Amazon Web Services tools like S3 and EC2

#### Summer Originate, Software Engineering Intern, New York City

2017 • Worked at this software consulting firm in Manhattan on a data center workload analysis contract

#### Summer MITRE Corporation, Research Assistant, Washington DC

• Worked for the Federal Aviation Administration (FAA) at this federally-funded R&D center to improve the Closed Runway Operations Prevention Device (CROPD) which prevents plane crashes

• Adapted computational linguistics algorithms to call-sign identification task in over 25,000 transmissions; edited strict language model based on air traffic controller's emerging speech patterns

#### Publications

Sept. 2020 **Data Migration using Datalog Program Synthesis**, Yuepeng Wang, <u>Rushi Shah</u>, Abby Criswell, Rong Pan, Isil Dillig, *Proceedings on Very Large DataBases (VLDB '20)* 

March 2020 TX Felon Disenfranchisement Enables Institutional Racism, Rushi Shah, The Daily Texan

June 2019 **Synthesizing Database Programs for Schema Refactoring**, Yuepeng Wang, James Dong, Rushi Shah, Isil Dillig, *Programming Languages Design & Implementation (PLDI '19)* 

## **Leadership**

#### 2017-2020 TX Votes (non-partisan civic engagement), STEM Committee Chairperson

 $\bullet$  Threw voter registration drive in Computer Science building, organized four *Tech & Politics Speaker Series* events, and personally registered over 250 voters

# Speaking Engagements

Dec. 2018 Moderator, Tech & Politics Speaker Series, Prof. Hovav Shacham on Election Security

Nov. 2018 Speaker, Math Directed Reading Symposium, "Gerrymandering Considered Harmful"

Apr. 2018 Speaker, Turing Lightning Talks, "Voting! For fun & profit."

Feb. '18,'19 Moderator, Great Conversations Gala, Annette Strauss Institute For Civic Life