

XI HE

hexi88@cs.duke.edu \diamond www.cs.duke.edu/~hexi88/

EDUCATION

- Duke University** Sep 2012 - Present
- PhD in Computer Science (GPA: 3.896/4.00)
 - Currently working on statistical privacy with Prof. Ashwin Machanavajjhala
- National University of Singapore** May 2008 - Dec 2012
- Bachelor of Science in Applied Mathematics with Honors (GPA: 4.56/5.00)
 - Bachelor of Computer Science with Honors (GPA: 4.43/5.00)
- Yale University** May 2010 - July 2010
- NUS-in-Yale Summer Program

PUBLICATIONS

- A. Machanavajjhala, X. He, “**Analyzing your location data with provable privacy guarantees**”, *Springer Handbook on Mobile Data Privacy 2017*
- X. He, A. Machanavajjhala, C. Flynn, D. Srivastava, “**Composing differential privacy and secure computation: a case study on scaling private record linkage**”, *CCS 2017*
- X. He, N. Raval, A. Machanavajjhala, “**A Demonstration of VisDPT: Visual Exploration of Differentially Private Trajectories**”, (BEST DEMO AWARD) *VLDB 2016*
- A. Machanavajjhala, X. He, M. Hay, “**Differential Privacy in the Wild: a tutorial on current practices & open challenges**”, *VLDB 2016, SIGMOD 2017*
- X. He, G. Cormode, A. Machanavajjhala, C. M. Procopiuc, D. Srivastava, “**DPT: Differentially private trajectory synthesis using hierarchical reference systems**”, *VLDB 2015*
- X. He, A. Machanavajjhala, B. Ding, “**Blowfish Privacy: Tuning Privacy-Utility Trade-offs using Policies**”, *SIGMOD 2014*
- Y.C. Tay, X. Zong, X. He, “**An Equation-Based Heap Sizing Rule**”, *Performance Evaluation 2013*

AWARDS

- Google PhD Fellowship in Privacy and Security**, Google 2017
- Best Demo Award**, VLDB Conference 2016
- Participant at 2016 Rising Stars Workshop**, Carnegie Mellon University 2016
- Outstanding Ph.D. Research Initial Project Award**, Duke University 2014
- Members of the U.S. Delegation to the 2nd HLF**, Heidelberg Laureate Forum Foundation 2014
- GHC Scholarship Grant**, Grace Hopper Celebration of Women in Computing 2014
- Duke Fellowship**, Duke University 2012 - Present
- Science Bursary Award**, National University of Singapore 2010 - 2012
- SOC Alumni Assistant Award**, National University of Singapore 2010
- Dean’s List**, Faculty of Science, National University of Singapore 2008 - 2009
- Dean’s List**, School of Computing, National University of Singapore 2008 - 2009
- Gold Medalist**, Singapore Mathematics Olympiad (Open) 2006
- Gold Medalist**, Singapore Mathematics Olympiad (Senior) 2004
- PRC School-Based Scholarship**, Minister of Education, Singapore 2004 - 2007

WORK EXPERIENCE

Microsoft Research July 2016 - Sep 2016
Research Intern with Srikanth Kandula USA

- Collaborated on reach project ‘Efficient Join Query Approximation’

AT&T Research Lab June 2014 - Aug 2014, June 2013 - Aug 2013
Research Intern with Divesh Srivastava, Ramón Cáceres and Cecilia M. Procopiuc USA

- Collaborated on ‘Differentially Private Trajectory Synthesis’

Barclays May 2012 - July 2012
Technology Intern Singapore

- Designed and implemented new automated features for the Bchat Bot Agent including regular announcement making and Q&A, for the Global Technology Infrastructure and Service division
- Organized the volunteer event ‘Magical Flyer’ with Movement for the Intellectually Disabled of Singapore as Barclays Intern Committee

Standard Chartered Bank Dec 2009, May 2010 - July 2010
Operation and Technology Intern Singapore

- Project: Global Unix Management Website Design & Development
- Built a webpage portal application for SCB global Unix Team to view server states

TEACHING & TALKS

“**Leave No Trace: Location Data with Provable Privacy Guarantees**”, *Invited speaker at Computer Science & Engineering Colloquium*, UT Arlington Fall 2017

“**Privacy with Constraints: Opportunities & Challenges**”, *Invited speaker at TPDP* 2017

“**CompSci 590.01: Data Cleaning & Integration**”, *Guest Lecturer on ‘PrivateClean: Data Cleaning & Differential Privacy’*, Lecturer: Prof. Jun Yang, Duke University Spring 2017

“**CompSci 216: Everything Data**”, *Guest Lecturer on ‘Data Streams’*, Lecturer: Prof. Ashwin Machanavajjhala, Duke University Spring 2017

“**CompSci 590.03: Privacy in a Mobile-Social World**”, *Guest Lecturer on ‘Differentially Private Empirical Risk Minimization’*, Lecturer: Prof. Ashwin Machanavajjhala, Duke University Fall 2016

“**CompSci 516: Data Intensive Computing Systems**”, *Guest Lecturer on ‘Data Privacy’*, Lecturer: Prof. Sudeepa Roy, Duke University Spring 2016

“**CompSci 590.02: Algorithms for Big Data**”, *Teaching Assistant: setup and graded homework and projects for 20 students*, Lecturer: Prof. Ashwin Machanavajjhala, Duke University Fall 2015

“**CompSci 230: Discrete Mathematics for Computer Science**”, *Teaching Assistant: conducted recitations for 70 students, graded homework and projects*, Lecturer: Prof. Susan Rodger, Duke University Fall 2013

“**Discrete Mathematics**”, *Teaching Assistant: conducted recitations for 60 students, graded homework and projects*, Lecturer: Prof. Stéphane Bressan, National University of Singapore Fall 2011

LEADERSHIP

President of Duke ACM-W Chapter, Duke University 2015

Vice President of Duke ACM-W Chapter, Duke University 2014, 2016, 2017

Vice President and External Performance Manager, NUS Chinese Dance Group 2008 - 2011

Publicity Head for NUS Biathlon 2011, NUS Sports Club 2011

Vice President of Student Committee, NUS ‘China, India and You 2010’ 2010