

# Nicholas L Farnan

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## Curriculum Vitae

*Last updated: 14 May, 2018*

### Positions Held

- 2015-Present **Lecturer**, *University of Pittsburgh*, Department of Computer Science.
- 2014-2015 **Visiting Lecturer**, *University of Pittsburgh*, Department of Computer Science.
- 2016-Present **College in High School Liaison for CS0008**, *University of Pittsburgh*.
- 2014-2018 **College in High School Liaison for CS0007**, *University of Pittsburgh*.

### Education

- 2008-2014 **Ph.D. Computer Science**, *University of Pittsburgh*, Advisor: Adam J. Lee, Dissertation: *Efficient, Locally-Enforceable Querier Privacy for Distributed Database Systems*.
- 2004-2007 **B.S. Computer Science**, *University of Pittsburgh*, Minor in Japanese, *CS GPA – 3.73*.

### Awards and Honors

- 2014 **Orrin E. and Margaret M. Taulbee Award for Excellence in Computer Science**, Recognizes teaching excellence and academic progress towards a Ph.D.
- 2014 **Dietrich School of Arts and Sciences Writing in the Disciplines Fellowship**, Fellowship for participation in the Writing in the Disciplines Faculty Seminar to enlarge the role of writing in undergraduate education.
- 2013 **Andrew Mellon Predoctoral Fellowship**, For students of exceptional promise and ability.

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## Teaching Experience

I have taught the following courses as a Lecturer at the University of Pittsburgh:

- CS 1501 **Algorithm Implementation**, *Fall 2014, Spring 2015, Fall 2015, Spring 2016, Fall 2016, Spring 2017, Fall 2017, Spring 2018.*
- CS 1555 **Database Management Systems**, *Fall 2015, Spring 2016, Summer 2016, Summer 2017, Summer 2018.*
- CS 1520 **Programming Languages for Web Applications**, *Summer 2016, Summer 2017, Summer 2018.*
- CS 1550 **Introduction to Operating Systems**, *Spring 2015, Spring 2018.*
- CS 0441 **Discrete Structures for Computer Science**, *Spring 2015.*

I have taught the following courses as a TA/TF at the University of Pittsburgh:

- CS 1520 **Programming Languages for Web Applications**, *Spring 2014.*

I led weekly recitations/labs and graded the following courses as a TA at the University of Pittsburgh:

- CS 1653 **Applied Cryptography and Network Security**, *Spring 2010.*
- CS 1567 **Programming and System Design on a Mobile Robot Platform**, *Spring 2010.*
- CS 0007 **Introduction to Programming in Python**, *Fall 2009.*
- CS 1502 **Formal Methods in Computer Science**, *Spring 2009.*
- CS 1666 **Principles of Computer Game Design and Implementation**, *Fall 2008.*
- CS 1501 **Algorithm Implementation**, *Spring 2008.*

Additional teaching experience:

**Undergraduate teaching assistant**, *Fall 2006*, University of Pittsburgh, Department of Computer Science.

**Computer science help desk tutor**, *2006-2007*, University of Pittsburgh, Department of Computer Science.

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## Publications

Refereed Conference Publications

- C4 **Nicholas L. Farnan**, Adam J. Lee, Panos K. Chrysanthis, and Ting Yu "PAQO: Preference-Aware Query Optimization for Decentralized Database Systems" in Proceedings of the 30<sup>th</sup> IEEE International Conference on Data Engineering (ICDE 2014), March 2014.
- C3 **Nicholas L. Farnan**, Adam J. Lee, Panos K. Chrysanthis, and Ting Yu "Don't Reveal My Intension: Protecting User Privacy Using Declarative Preferences during Distributed Query Processing" in Proceedings of the 16<sup>th</sup> European Symposium on Research in Computer Security (ESORICS 2011), September 2011.

- C2 José Brustoloni, **Nicholas L. Farnan**, Ricardo Villamarín-Salomón, and David Kyle. "Efficient Detection of Bots in Subscribers' Computers" in the Proceedings of the IEEE International Conference on Communications (ICC 2009), June 2009.
- C1 Peter Djalaliev, Muhammad Jamshed, **Nicholas L. Farnan**, and José Brustoloni. "Sentinel: Hardware-Accelerated Mitigation of Bot-Based DDoS Attacks" in the Proceedings of the 17<sup>th</sup> IEEE International Conference on Computer Communications and Networks (ICCCN 2008), August 2008.

#### Refereed Workshop Publications

- W1 **Nicholas L. Farnan**, Adam J. Lee, and Ting Yu "Investigating Privacy-Aware Distributed Query Evaluation" in Proceedings of the Ninth ACM Workshop on Privacy in the Electronic Society (WPES 2010), October 2010.

#### Refereed Demonstrations

- D3 Nathan R. Ong, Stephen E. Rojcewicz, **Nicholas L. Farnan**, Adam J. Lee, Panos K. Chrysanthis, and Ting Yu "Interactive Preference-Aware Query Optimization" to appear in the Proceedings of the 31<sup>st</sup> International Conference on Data Engineering (ICDE 2015), April 2015.
- D2 **Nicholas L. Farnan**, Adam J. Lee, Panos K. Chrysanthis, and Ting Yu "PAQO: A Preference-Aware Query Optimizer for PostgreSQL" in the Proceedings of the 39<sup>th</sup> International Conference on Very Large Databases (VLDB 2013), August 2013.
- D1 **Nicholas L. Farnan**, Adam J. Lee, Panos K. Chrysanthis, and Ting Yu "Enabling Intensional Access Control via Preference-aware Query Optimization" in the Proceedings of the 18<sup>th</sup> ACM Symposium on Access Control Models and Technologies (SACMAT 2013), June 2013.

#### Other Publications

- NR1 **Nicholas L. Farnan**, Adam J. Lee, Panos K. Chrysanthis, and Ting Yu "Don't Reveal My Intension: Protecting User Privacy Using Declarative Preferences during Distributed Query Processing" in University of Pittsburgh Department of Computer Science Technical Report No. TR-11-179, October 2011.

## Department Service

**Graduate Evaluation, Assignment, and Training Committee**, 2015-present.

**Undergraduate Recruiting and Advising Committee**, 2014-present.

**Undergraduate Assessment Committee**, 2014-present.

**Outreach Committee**, 2014-present.

## Professional Service

Journal Reviewer

**Distributed and Parallel Databases (Springer).**

## External Conference Reviewer

**Annual Computer Security Applications Conference,**  
*ACSAC 2013.*

**ACM Symposium on Information, Computer, and Communications Security,**  
*ASIACCS 2011.*

**ACM International Conference on Information and Knowledge Management,**  
*CIKM 2013.*

**ACM Conference on Data and Application Security and Privacy,**  
*CODASPY 2013, 2014, 2016.*

**IEEE International Conference on Cyber-Enabled Distributed Computing and Knowledge Discovery,**  
*CyberC 2013.*

**IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy,**  
*DBSec 2012.*

**European Symposium on Research in Computer Security,**  
*ESORICS 2011, 2012, 2013.*

**IEEE Workshop on Hot Topics in System Dependability,**  
*HotDep 2011.*

**IEEE International Conference on Data Engineering,**  
*ICDE 2013, 2014.*

**International Conference on Network and System Security,**  
*NSS 2013.*

**Privacy Enhancing Technologies Symposium,**  
*PETS 2013, 2014.*

**ACM Symposium on Access Control Models and Technologies,**  
*SACMAT 2012, 2013, 2014.*

**International Conference on Security and Cryptography,**  
*SECrypt 2012, 2013.*

**ACM SIGMOD International Conference on Management of Data,**  
*SIGMOD 2011, 2012.*

**Security & Trust Management,**  
*STM 2013.*

**ACM Workshop on Privacy in the Electronic Society,**  
*WPES 2011, 2013.*