# Brian Tyrrell Nixon

Curriculum Vitae Last Updated: May 15<sup>th</sup>, 2024

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### **Education**

#### **University of Pittsburgh**

August 2020 - Present

Ph. D. in Computer Science

Advisor: Dr. Panos K. Chrysanthis

**Dissertation:** 

#### **University of Pittsburgh**

August 2016 - April 2020

Bachelor's Degree in Computer Science and Minor in Mathematics

**Cumulative GPA:** 3.64 / 4.0

## **Teaching Experience**

#### Teaching Fellow, University of Pittsburgh

- Instructor of Record for CS 1555: Database Management Systems (Fall 2024)

#### Teaching Assistant, University of Pittsburgh

- CS 2550: Principles of Database Systems (Spring 2024)
- CS 1555: Database Management Systems (Fall 2020, Fall 2022, Spring 2023, Fall 2023, Spring 2024)
- CS 1501: Algorithms and Data Structures 2 (Spring 2021, Fall 2021, Summer 2022, Spring 2023)

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- CS 1520: Programming Languages for Web Applications (Spring 2022)
- CS 1653: Applied Cryptography and Network Security (Fall 2021)
- CS 0445: Algorithms and Data Structures 1 (Summer 2021)
- CS 1657: Privacy in the Electronic Society (Spring 2021)

#### **Undergraduate Teaching Assistant University of Pittsburgh**

- CS 1555: Database Management Systems (Spring 2020)
- CS 0445: Data Structures (Fall 2018, Fall 2019)
- CS 0441: Discrete Structures for Computer Science (Spring 2019, Spring 2020)

## **Publications**

## **Conference and Workshop Papers**

[C1.] "RETSINA: Reproducibility and Experimentation Testbed for Signal-Strength Indoor Near Analysis",

Anna Baskin, **Brian T. Nixon**, Panos K. Chrysanthis, Christos Laoudias, Constantinos Costa, *Proceedings of the 13th IEEE International Conference on Indoor Positioning and Indoor Navigation*, **IPIN'23**, 2023.

[C2.] "Remembering the Forgotten: Clustering, Outlier Detection, and Accuracy Tuning in a Postdiction Pipeline",

Anna Baskin, Scott Heyman, **Brian T. Nixon**, Constantinos Costa, Panos K. Chrysanthis, *27th European Conference on Advances in Databases and Information Systems*, **ADBIS'23**, 2023.

[C3.] "A Context, Location, and Preference-Aware System for Safe Pedestrian Mobility",

Constantinos Costa, **Brian T. Nixon**, Sayantani Bhattacharjee, Benjamin Graybill, Demetrios Zeinalipour-Yazti, Walter Schneider, Panos K. Chrysanthis, *Proceedings of the 22nd IEEE International Conference on Mobile Data Management*, **MDM'21**, 2021.

## **Demo Papers**

[D1.] "GIO.G: A Generator for Indoor-Outdoor Graphs to Simulate and Analyze in Urban Environments",

- Vasilis E. Sarris, Connor P. Sweeney, Sean M. Linton, **Brian T. Nixon**, Panos K. Chrysanthis, Constantinos Costa, *Proceedings of the 25th IEEE International Conference on Mobile Data Management*, **MDM'24**, 2024.
- [D2.] "CAPRIO with Inclusive Pedestrian Path Recommendations",
  Brian T. Nixon, Zhiyong Chen, Sai Konduru, Yuxin Liu, Constantinos
  Costa, Panos K. Chrysanthis, Proceedings of the 24th IEEE International
  Conference on Mobile Data Management, MDM'23, 2023.
- [D3.] "Efficient Detection of COVID-19 Exposure",

  Brian T. Nixon, Rakan Alseghayer, Constantinos Costa, Benjamin Graybill,

  Xiaozhong Zhang, Panos K. Chrysanthis, Proceedings of the 23rd IEEE

  International Conference on Mobile Data Management, MDM'22, 2022.
- [D4.] "HealthDist: A Context, Location and Preference-Aware System for Safe Navigation",

**Brian T. Nixon**, Sayantani Bhattacharjee, Benjamin Graybill, Constantinos Costa, Sudhir Pathak, Walter Schneider, Panos K. Chrysanthis, *Proceedings of the 22nd IEEE International Conference on Mobile Data Management*, **MDM'21**, 2021.

## **Posters & Abstracts**

[A1.] "Remembering the Forgotten: Clustering, Outlier Detection, and Accuracy Tuning in a Postdiction Pipeline",

Anna Baskin, Scott Heyman, **Brian T. Nixon**, Constantinos Costa, Panos K. Chrysanthis, *The 18th Hellenic Data Management Symposium (poster session)*, **HDMS'24**, 2024.

## Awards & Honors

- Orrin E. & Margaret M. Taulbee Award for Excellence in Computer Science (April 2022, December 2023)
  - Recognizes teaching excellence and academic progress towards a Ph.D.
  - Demonstrated strong research interests through scholarly publications
- IEEE MDM'21: Best Industry and Application Paper Award at MDM'21, "A Context, Location and Preference-Aware System for Safe Pedestrian Mobility", 22nd IEEE International Conference on Mobile Data Management (MDM'21), Toronto, Canada, June 15 - June 18, 2021.

- IEEE MDM'21: Best Demo Paper Award at MDM'21, "HealthDist: A Context, Location, and Preference-Aware System for Safe Navigation", 22nd IEEE International Conference on Mobile Data Management (MDM'21), Toronto, Canada, June 15 June 18, 2021.
- SCI Summer Scholar Research Program (August 2019)

## **Professional Experience**

#### **Teaching Assistant (TA)**

University of Pittsburgh, Department of Computer Science (May 2020 - Present)

#### CS & DS Committee Member & Reviewer

University of Pittsburgh, SCI

Committee member and reviewer for the Appointment Stream Teaching Assistant Professor position in Computer Science and Data Science. (2023 - 2024)

#### **External Reviewer**

- 27th European Symposium on Research in Computer Security, ES-ORICS2022 (June 2022)
- Proceedings of the 48<sup>th</sup> International Conference on Very Large Data Bases, VLDB2022 (March 2022)
- 37<sup>th</sup> IEEE International Conference on Data Engineering, ICDE2021 (July 2020)

**Diversity and Inclusion Committee Member** 16th ACM International Conference on Distributed and Event-Based Systems, DEBS2022 (June 2022)

## **Undergraduate Teaching Assistant (UTA)**

University of Pittsburgh, Department of Computer Science (August 2018 - May 2020)