

John Paparrizos

ASSISTANT PROFESSOR · THE OHIO STATE UNIVERSITY, COLUMBUS, OH, USA
DIRECTOR · THE DATA ANALYTICS, UNDERSTANDING, MINING, AND MANAGEMENT (DATUM) LAB

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Research Interests

DATA ANALYTICS · DATA MANAGEMENT · DATA MINING · DATA SCIENCE · APPLIED MACHINE LEARNING · TIME-SERIES ANALYSIS

My research enables the next generation of **data-intensive and machine-learning applications**. My work addresses the lack of **task-aware and data-driven adaptations** for managing and analyzing structured and unstructured data, such as relational, time-series, multimedia, text, graphs, Web, and IoT data. My adaptive solutions, from compression, representation, and indexing to computational methods, exploit data similarities, densities, shapes, and distributions, and lead to significant effectiveness and performance gains for large-scale data science applications.

Education

Columbia University

New York, NY, USA

PH.D. IN COMPUTER SCIENCE, GPA: **4.14/4.00** (ADVISOR: **LUIS GRAVANO**)

October, 2018

- Thesis: "Fast, Scalable, and Accurate Algorithms for Time-Series Analysis"
- 🏆 **2019 ACM SIGKDD Doctoral Dissertation Award, Honorable Mention**

Columbia University

New York, NY, USA

M.PHIL. IN COMPUTER SCIENCE, GPA: **4.14/4.00** (ADVISOR: **LUIS GRAVANO**)

May, 2015

École Polytechnique Fédérale de Lausanne (EPFL)

Lausanne, Switzerland

M.S. IN COMPUTER SCIENCE, "EXCELLENT" DISTINCTION (ADVISOR: **KARL ABERER**)

October, 2011

Aristotle University of Thessaloniki (AUTH)

Thessaloniki, Greece

B.S. IN COMPUTER SCIENCE, "EXCELLENT" DISTINCTION & SALUTATORIAN (ADVISOR: **ATHENA VAKALI**)

July, 2009

University Experience

The Ohio State University (OSU)

Columbus, OH, USA

ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2022 - Present

DIRECTOR, THE DATA ANALYTICS, UNDERSTANDING, MINING, AND MANAGEMENT (DATUM) LAB

2022 - Present

University of Chicago

Chicago, IL, USA

POSTDOCTORAL RESEARCHER, DEPARTMENT OF COMPUTER SCIENCE (ADVISORS: **MICHAEL FRANKLIN** AND **AARON ELMORE**)

2018 - 2022

Columbia University

New York, NY, USA

GRADUATE RESEARCH ASSISTANT, DEPARTMENT OF COMPUTER SCIENCE (ADVISOR: **LUIS GRAVANO**)

2012 - 2018

École Polytechnique Fédérale de Lausanne (EPFL)

Lausanne, Switzerland

RESEARCH ASSISTANT, SCHOOL OF COMPUTER AND COMMUNICATION SCIENCES (ADVISOR: **KARL ABERER**)

2009 - 2011

Awards, Honors, Achievements, and Fellowships

AWARDS, HONORS, AND ACHIEVEMENTS

IEEE TCDE Rising Star Award

2023 The IEEE Technical Committee on Data Engineering (TCDE) recognizes internationally an individual's work in the first five years after the Ph.D. degree. Citation: "For breakthroughs in time series data management, as well as contributions to adaptive methodologies for data intensive and machine learning applications." IEEE TCDE

ACM SIGKDD Doctoral Dissertation Award, Honorable Mention

2019 The ACM Special Interest Group on Knowledge Discovery and Data Mining (SIGKDD) recognizes "outstanding doctoral dissertations in the areas of data science, machine learning, and data mining" internationally. ACM SIGKDD

NetApp Faculty Award

2018 Recognizes faculty "pursuing cutting-edge research in data management." First time awarded to a postdoc. NetApp

Front page of The New York Times covers research on (first-authored) [L5]

2016 Media coverage of our study on building a screening solution for devastating diseases using Web search logs. The New York Times

ISSI "Paper of the Year" Award Finalist for [L4]

2016 The International Society for Scientometrics and Informetrics (ISSI) recognizes "high quality research in the field of Scientometrics and Informetrics." In the ten finalists, voted among publications from 2014 to 2016. ISSI Society

ACM SIGMOD Research Highlight Award for (first-authored) [L1]

- 2015 The ACM Special Interest Group on Management of Data (SIGMOD) recognizes projects across premier database conferences that “exemplify core database research, address an important problem, represent a definitive milestone in solving the problem, and have the potential of significant impact.” *ACM SIGMOD*
- 2015 “Best of ACM SIGMOD” for (first-authored) [L1] *ACM SIGMOD*
Our paper was one of the two best papers of ACM SIGMOD International Conference on Management of Data.

FELLOWSHIPS AND SCHOLARSHIPS

- 2016 **Paul Nichoplas Scholarship, Columbia University**
Recognizes graduate or undergraduate students of Greek ancestry. Covers stipend and tuition expenses.
- 2014 **Alexander S. Onassis Foundation Fellowship** (3 Ph.D. fellows in computer science out of 1000+ submissions in all areas.)
Recognizes Greek graduate students with outstanding academic record.
- 2013 **Empirikion Foundation Scholarship** (acceptance rate ~10%)
Recognizes Greek scholars in Medicine, Physics, Chemistry, Biology, Mathematics, Computer Science, and Engineering areas.
- 2012 **Gerondelis Scholarship**
Recognizes students of Greek ancestry ranked at the top of their class.
- 2011 **A. G. Leventis Foundation Fellowship** (acceptance rate ~10%)
Recognizes Greek graduate students in Social Sciences, Technology, Arts, Natural Sciences, Medical, and Business fields.
- 2010 **Zeno Karl Schindler Foundation Scholarship**
Supports “cutting-edge research in the fields of engineering.”
- 2009 **The General Michael Arnautis Foundation Scholarship** (acceptance rate ~10%)
Recognizes top Greek undergraduate students in Computer Science and Engineering fields for post-graduate studies abroad.

Industry Experience

Microsoft Research

RESEARCH INTERN (MENTORS: **ERIC HORVITZ**, **RYEN WHITE**, AND **FERNANDO DIAZ**)

Redmond, WA, USA

Summer 2014 & 2015

Yahoo! Research Labs

RESEARCH INTERN (MENTOR: **ARIS GIONIS**)

Barcelona, Spain

2011

Logitech

PROJECT MANAGEMENT INTERN (MENTOR: **VP OF PRODUCT MARKETING, DENIS PAVILLARD**)

Lausanne, Switzerland

2010

Visiting Positions

Université Paris Cité

VISITING PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE (HOST: **THEMIS PALPANAS**)

Paris, France

December 2022

University of Illinois, Urbana-Champaign (UIUC)

VISITING SCHOLAR, DEPARTMENT OF COMPUTER SCIENCE (HOST: **JIawei Han**)

Champaign, IL, USA

Summer 2010

Funding and Gifts

- 2022 **JobsOhio**, Unrestricted Research Gift; **Sole PI** \$ 200,000
- 2022 **Meta Research**, Unrestricted Research Gift; **Sole PI** \$ 50,000
- 2020 **Exelon Utilties**, Unrestricted Research Gift; **Sole PI** \$ 150,000
- 2019 **Cisco Systems**, Unrestricted Research Gift; **Sole PI** \$ 73,000
- 2018 **NetApp**, Unrestricted Research Gift; **Sole PI** \$ 50,000

Invited Talks

CONFERENCES

- 2023 Executive Lunch, IEEE International Conference on Data Engineering (**IEEE ICDE 2023**) *Anaheim, CA, USA*
- 2019 Awards Session, ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**ACM SIGKDD 2019**) *Anchorage, AK, USA*

UNIVERSITIES

- 2022 Computer Science Department, **Université Paris Cité** *Paris, France*
- 2022 School of Informatics, **Aristotle University of Thessaloniki** *Thessaloniki, Greece*
- 2022 Stern School of Business, **New York University** *New York, NY, USA*
- 2022 Department of Computer Science and Engineering, **The Ohio State University** *Columbus, OH, USA*
- 2022 School of Computer and Communication Sciences, **École Polytechnique Fédérale de Lausanne** *Lausanne, Switzerland*
- 2022 Department of Computer Science and Engineering, **University of California, San Diego** *La Jolla, CA, USA*

2022	Halicioğlu Data Science Institute, University of California, San Diego	La Jolla, CA, USA
2022	Centre National de la Recherche Scientifique (CNRS)	Paris, France
2022	Computer Science Department, Columbia University	New York, NY, USA
2022	Department of Computer and Information Science, University of Pennsylvania	Philadelphia, PA, USA
2022	Khoury College of Computer Sciences, Northeastern University	Boston, MA, USA
2022	Department of Computer Science, University of Illinois, Chicago	Chicago, IL, USA
2022	Computer Science Department, New York University	New York, NY, USA
2022	Department of Electrical and Computer Engineering, University of Southern California	Los Angeles, CA, USA
2021	Computer Science Department, Columbia University	New York, NY, USA
2021	School of Computer Science, Mohammed VI Polytechnic University	Ben Guerir, Morocco
2020	Computer Science Department, Columbia University	New York, NY, USA
2019	Department of Computer Science, University of Chicago	Chicago, IL, USA
2019	Department of Computer Science, Boston University	Boston, MA, USA
2018	Department of Computer Science, University of Chicago	Chicago, IL, USA
2017	Computer Science Department, Stanford University	Stanford, CA, USA

Publications

PAPERS (REGULAR/LONG) IN REFEREED JOURNALS AND CONFERENCES

Proc. VLDB 2023 <i>Under Revision</i>	“Choose Wisely: An Extensive Evaluation of Model Selection for Anomaly Detection in Time Series” EMMANOUIL SYLLIGARDOS, PAUL BONIOL, JOHN PAPARRIZOS , PANOS TRAHANIAS, AND THEMIS PALPANAS <i>Under Revision at the Proceedings of the VLDB Endowment (PVLDB 2023) Journal, pages 1-14</i>	[L20]
Proc. VLDB 2023 <i>Journal</i>	“Accelerating Similarity Search for Elastic Measures: A Study and New Generalization of Lower Bounding Distances” JOHN PAPARRIZOS , KAIZE WU, AARON ELMORE, CHRISTOS FALOUTSOS, AND MICHAEL J. FRANKLIN <i>Proceedings of the VLDB Endowment (PVLDB 2023) Journal, Volume 16, pages 2019-2032</i>	[L19]
UbiComp 2023 <i>Conference</i>	“AMIR: Active Multimodal Interaction Recognition from Video and Network Traffic in Connected Environments” SHINAN LIU, TARUN MANGLA, TED SHAO WANG, JINJIN ZHAO, JOHN PAPARRIZOS , SANJAY KRISHNAN, AND NICK FEAMSTER <i>ACM International Joint Conference on Pervasive and Ubiquitous Computing (ACM Ubicomp 2023), pages 1-26</i>	[L18]
Proc. VLDB 2022 <i>Journal</i>	“Volume Under the Surface: A New Accuracy Evaluation Measure for Time-Series Anomaly Detection” JOHN PAPARRIZOS , PAUL BONIOL, THEMIS PALPANAS, RUEY S. TSAY, AARON ELMORE, AND MICHAEL J. FRANKLIN <i>Proceedings of the VLDB Endowment (PVLDB 2022) Journal, Volume 15, pages 2774-2787</i>	[L17]
Proc. VLDB 2022 <i>Journal</i>	“TSB-UAD: An End-to-End Benchmark Suite for Univariate Time-Series Anomaly Detection” JOHN PAPARRIZOS , YUHAO KANG, PAUL BONIOL, RUEY S. TSAY, THEMIS PALPANAS, AND MICHAEL J. FRANKLIN <i>Proceedings of the VLDB Endowment (PVLDB 2022) Journal, Volume 15, pages 1697-1711</i>	[L16]
ICDE 2022 <i>Conference</i>	“Fast Adaptive Similarity Search through Variance-Aware Quantization” JOHN PAPARRIZOS , IKRADUYA EDIAN, CHUNWEI LIU, AARON ELMORE, AND MICHAEL J. FRANKLIN <i>38th IEEE Int. Conference on Data Engineering (IEEE ICDE 2022), pages 2969-2983</i>	[L15]
CIDR 2021 <i>Conference</i>	“VergeDB: A Database for IoT Analytics on Edge Devices” JOHN PAPARRIZOS , CHUNWEI LIU, BRUNO BARBARIOLI, JOHNNY HWANG, IKRADUYA EDIAN, AARON ELMORE, ET AL. <i>11th Conference on Innovative Data Systems Research (CIDR 2021), pages 1-8</i>	[L14]
SIGMOD 2021 <i>Conference</i>	“Good to the Last Bit: Data-Driven Encoding with CodecDB” HAO JIANG, CHUNWEI LIU, JOHN PAPARRIZOS , ANDREW CHIEN, JIHONG MA, AND AARON ELMORE <i>2021 ACM SIGMOD Int. Conference on Management of Data (ACM SIGMOD 2021), pages 843-856</i>	[L13]
Proc. VLDB 2021 <i>Journal</i>	“Decomposed Bounded Floats for Fast Compression and Queries” CHUNWEI LIU, HAO JIANG, JOHN PAPARRIZOS , AND AARON ELMORE <i>Proceedings of the VLDB Endowment (PVLDB 2021) Journal, Volume 14, pages 2586-2598</i>	[L12]
Proc. VLDB 2021 <i>Journal</i>	“SAND: Streaming Subsequence Anomaly Detection” PAUL BONIOL, JOHN PAPARRIZOS , THEMIS PALPANAS, AND MICHAEL FRANKLIN <i>Proceedings of the VLDB Endowment (PVLDB 2021) Journal, Volume 14, pages 1717-1729</i>	[L11]

SIGMOD 2020 Conference	“Debunking Four Long-Standing Perceptions in Time-Series Analytics” JOHN PAPARRIZOS , CHUNWEI LIU, AARON ELMORE, AND MICHAEL FRANKLIN 2020 ACM SIGMOD Int. Conference on Management of Data (ACM SIGMOD 2020), pages 1887-1905	[L10]
Proc. VLDB 2020 Journal	“PIDS: Attribute Decomposition for Improved Compression and Query Performance in Columnar Storage” HAO JIANG, CHUNWEI LIU, QI JIN, JOHN PAPARRIZOS AND AARON ELMORE Proceedings of the VLDB Endowment (VLDB 2020) Journal, Volume 13, pages 925-938	[L9]
Proc. VLDB 2019 Journal	“GRAIL: Efficient Time-Series Representation Learning” JOHN PAPARRIZOS AND MICHAEL FRANKLIN Proceedings of the VLDB Endowment (VLDB 2019) Journal, Volume 12, pages 1762-1777	[L8]
ICML 2019 Conference	“Band-limited Training and Inference for Convolutional Neural Networks” ADAM DZIEDZIC [‡] , JOHN PAPARRIZOS [‡] , SANJAY KRISHNAN, AARON ELMORE, AND MICHAEL FRANKLIN 36 th Int. Conference on Machine Learning (ICML 2019), pages 1745-1754 ([‡] : Equal contribution)	[L7]
TODS 2017 Journal	“Fast and Accurate Time-Series Clustering” JOHN PAPARRIZOS AND LUIS GRAVANO ACM Transactions on Database Systems (ACM TODS 2017) Journal, Volume 42, 49 pages	[L6]
JOP 2016 Journal	“Screening for Pancreatic Adenocarcinoma using Signals from Web Search Logs” JOHN PAPARRIZOS , RYEN W. WHITE, AND ERIC HORVITZ Journal of Oncology Practice (JOP 2016), Volume 12, pages 737-744  COVERED BY THE NEW YORK TIMES, THE WASHINGTON POST, AND OTHER MEDIA OUTLETS	[L5]
JASIST 2016 Journal	“Predicting the impact of scientific concepts using full text features” KATHY MCKEOWN ⁺ , HAL DAUME ⁺ , SNIGDHA CHATURVEDI [‡] , JOHN PAPARRIZOS [‡] , KAPIL THADANI [‡] , ET AL. Journal of the American Society for Information Science and Technology (JASIST 2016), Volume 67, pages 2684-2696 ⁺ : Lead PIs ; [‡] : Lead student authors in alphabetical order  ISSI “PAPER OF THE YEAR” AWARD, FINALIST	[L4]
SocInfo 2016 Conference	“The Social Dynamics of Language Chance in Online Networks” RAHUL GOEL, SANDEEP SONI, NAMAN GOYAL, JOHN PAPARRIZOS , HANNA WALLACH, ET AL. 8 th Int. Conference on Social Informatics (SocInfo 2016), pages 41-57  COVERED BY FAST COMPANY	[L3]
SIGKDD 2016 Conference	“Detecting Devastating Diseases in Search Logs” JOHN PAPARRIZOS , RYEN W. WHITE, AND ERIC HORVITZ 2016 ACM SIGKDD Int. Conference on Knowledge Discovery and Data Mining (ACM SIGKDD 2016), pages 559-568	[L2]
SIGMOD 2015 Conference	“k-Shape: Efficient and Accurate Clustering of Time Series” JOHN PAPARRIZOS AND LUIS GRAVANO 2015 ACM SIGMOD Int. Conference on Management of Data (ACM SIGMOD 2015), pages 1855-1870  “BEST OF ACM SIGMOD”  ACM SIGMOD RESEARCH HIGHLIGHT AWARD	[L1]

TUTORIALS IN REFEREED JOURNALS AND CONFERENCES

EDBT 2023 Conference	“New Trends in Time Series Anomaly Detection” PAUL BONIOL, JOHN PAPARRIZOS , AND THEMIS PALPANAS International Conference on Extending Database Technology (EDBT 2023), pages 847-850	[T1]
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DEMONSTRATIONS IN REFEREED JOURNALS AND CONFERENCES

Proc. VLDB 2023 Journal	“Odyssey: An Engine Enabling The Time-Series Clustering Journey” JOHN PAPARRIZOS AND TEJA BOGIREDDY Proceedings of the VLDB Endowment (PVLDB 2023) Journal, Demo track, pages 1-4	[D4]
Proc. VLDB 2022 Journal	“Theseus: Navigating the Labyrinth of Time-Series Anomaly Detection” PAUL BONIOL, JOHN PAPARRIZOS , YUHAO KANG, THEMIS PALPANAS, RUEY S. TSAY, ET AL. Proceedings of the VLDB Endowment (VLDB 2022) Journal, Demo track, Volume 15, pages 3702-3705	[D3]
Proc. VLDB 2021 Journal	“SAND in Action: Subsequence Anomaly Detection for Streams” PAUL BONIOL, JOHN PAPARRIZOS , THEMIS PALPANAS, AND MICHAEL FRANKLIN Proceedings of the VLDB Endowment (VLDB 2021) Journal, Demo track, Volume 14, pages 2867-2870	[D2]

ICDE 2011 “Advanced Search, Visualization, and Tagging of Sensor Metadata” [D1]
Conference **JOHN PAPARRIZOS**, HOYOUNG JEUNG, AND KARL ABERER
 27th IEEE Int. Conference on Data Engineering (**IEEE ICDE 2011**), Demo track, pages 1356-1359

OTHER REFEREED PAPERS (E.G., SHORT PAPERS)

PowerTech 2021 “k-ShapeStream: Probabilistic Streaming Clustering for Electric Grid Events” [S8]
Conference MOHINI BARIYA, ALEXANDRA VON MEIER, **JOHN PAPARRIZOS**, AND MICHAEL FRANKLIN
 14th IEEE PowerTech Conference (**PowerTech 2021**), pages 1-6

OSR 2019 “Artificial intelligence in resource-constrained and shared environments” [S7]
Journal SANJAY KRISHNAN, AARON ELMORE, MICHAEL FRANKLIN, **JOHN PAPARRIZOS**, ZECHAO SHANG, ET AL.
 ACM SIGOPS Operating Systems Review (**OSR 2019**), Volume 53, pages 1-6

PROMS 2013 “A tight bound on the worst-case number of comparisons for Floyd’s heap construction algorithm” [S6]
Book Series **JOHN PAPARRIZOS**
 Proceedings in Mathematics and Statistics, (PROMS 2013) (**PROMS 2013**), Volume 31, pages 153-162

PROMS 2013 “Homogeneous and non-homogeneous algorithms” [S5]
Book Series **JOHN PAPARRIZOS**
 Proceedings in Mathematics and Statistics, (PROMS 2013) (**PROMS 2013**), Volume 31, pages 241-248

RecSys 2011 “Machined Learned Job Recommendation” [S4]
Conference **JOHN PAPARRIZOS**, BERKANT B. CAMBAZOGLU, AND ARISTIDES GIONIS
 5th ACM Conference on Recommender Systems (**ACM RecSys 2011**), pages 325-328

LCN 2011 “Quantitative analysis for authentication of low-cost RFID tags” [S3]
Conference **JOHN PAPARRIZOS**, STYLIANOS BASAGIANNIS, AND SOPHIA PETRIDOU
 36th IEEE Conference on Local Computer Networks (**IEEE LCN 2011**), pages 295-298


SUTC 2010 “Effective Metadata Management in Federated Sensor Networks” [S2]
Conference HOYOUNG JEUNG, SOFIANE SARNI, **JOHN PAPARRIZOS**, SAKET SATHE, KARL ABERER, ET AL.
 2010 IEEE Int. Conference on Sensors, Ubiquitous, and Trustworthy Computing (**IEEE SUTC 2010**), pages 107-114


HT 2010 “Automatic extraction of structure, content and usage data statistics of web sites” [S1]
Conference JOHN PAPARRIZOS, VASO KOUTSONIKOLA, LEFTERIS ANGELIS, AND ATHENA VAKALI
 21st ACM conference on Hypertext and Hypermedia (**ACM HT 2010**), pages 301-302


Patents


2021 “Fast Multi-Dimensional Search Based on Variance-Aware Quantization”, **John Paparrizos**, Ikraduya Edian, Chunwei Liu, Aaron Elmore, and Michael J. Franklin. (Application 63/188,332 on 5/2021 - US Patent Office)


Software Artifacts and Benchmarks Released


GLB [L19]  www.timeseries.org/glb - A library evaluating 11 lower bounding measures spanning 7 elastic measures


AMIR [L18]  <https://amir-vidnet.github.io/> - Video and network data for interaction recognition in connected environments


VUS [L17]  www.timeseries.org/vus - A new accuracy evaluation measure for time-series anomaly detection


TSB-UAD [L16]  www.timeseries.org/tsb-uad - An end-to-end anomaly detection benchmark suite with 12k+ time series


VAQ [L15]  <https://github.com/TheDatumOrg/VAQ> - A new product quantization method for fast adaptive similarity search

BUFF [L12]  www.timeseries.org/buff - A new fast compression method for floats with support for in-situ analytics

TSDistEval [L10]  www.timeseries.org/tsdisteval - A library of 70+ time-series distance measures belonging in five categories

GRAIL [L8]  www.timeseries.org/grail - A library for similarity-preserving time-series representation learning

BL-CNNs [L7]  www.timeseries.org/bandlimited-cnns - Training and inference with frequency spectra constraints for CNNs

k-Shape [L1]  www.timeseries.org/kshape-python - A fast and accurate univariate time-series clustering algorithm

Teaching Experience

The Ohio State University

INSTRUCTOR FOR “READINGS IN DATA ANALYTICS” COURSE - 10 STUDENTS (**OVERALL INSTRUCTOR RATING: 4.4/5.0**)

INSTRUCTOR FOR “INTRODUCTION TO DATA MINING” COURSE - 56 STUDENTS (**OVERALL INSTRUCTOR RATING: 4.4/5.0**)

Columbus, OH, USA

Spring 2023

Fall 2022

University of Chicago

MENTOR FOR “DATA SCIENCE CLINIC” COURSE

GUEST LECTURER FOR “DATABASES” COURSE (INSTRUCTOR: **AARON ELMORE**)

Chicago, IL, USA

Fall 2021 & Winter 2022

Fall 2019

Boston University

GUEST LECTURER FOR “DATA SYSTEMS ARCHITECTURES” COURSE (INSTRUCTOR: **MANOS ATHANASSOULIS**)

Boston, MA, USA

Spring 2019

Columbia University

GUEST LECTURER FOR “ADVANCED DATABASE SYSTEMS” COURSE (INSTRUCTOR: **LUIS GRAVANO**)

New York, NY, USA

Fall 2015 & 2017, Spring 2020 - 2023

TEACHING ASSISTANT FOR “ADVANCED DATABASE SYSTEMS” COURSE - 77 STUDENTS (**TA OVERALL RATING: 5.0/5.0**)

Fall 2017

TEACHING ASSISTANT FOR “ADVANCED DATABASE SYSTEMS” COURSE - 79 STUDENTS (**TA OVERALL RATING: 5.0/5.0**)

Fall 2015

Mentoring Experience

PH.D. STUDENT SUPERVISION

Suchit Gupta The Ohio State University, Ph.D., 2023-now

Haojun Li The Ohio State University, Ph.D., 2023-now

Qinghua Liu The Ohio State University, Ph.D., 2023-now

Fan Yang The Ohio State University, Ph.D., 2023-now

Paul Boniol University of Paris, Ph.D., 2020-2022 (with **Themis Palpanas**)

Mohini Bariya University of California, Berkeley, Ph.D., Summer 2020 (with **Alexandra von Meier**), Next: Research Scientist at nLine

Chunwei Liu University of Chicago, Ph.D., 2019-2022 (with **Aaron Elmore**), Next: Postdoc at MIT

Hao Jiang University of Chicago, Ph.D., 2019-2021 (with **Aaron Elmore**), Next: Postdoc at Harvard University

Adam Dziedzic University of Chicago, Ph.D., 2018-2019 (with **Aaron Elmore & Sanjay Krishnan**), Next: Postdoc at UToronto

M.S. STUDENT SUPERVISION

Yuhao Kang University of Chicago, M.S., 2021-2022, Next: Software Engineer at Amazon

Teja Bogireddy University of Chicago, M.S., 2020-2021, Next: Data Scientist at Exelon

M.S. COMMITTEES

Aditya Vadlamani The Ohio State University, M.S. Thesis, 2023 (Advisor: Srinivasan Parthasarathy)

Nitin Balaji The Ohio State University, M.S. Thesis, 2023 (Advisor: Xia Ning)

B.S. STUDENT SUPERVISION

Kaize Wu University of Chicago, B.S., 2021-2023

Karhan Kayan University of Chicago, B.S., 2020-2022, Next: Ph.D. student at Princeton University

Azam Mohsin University of Chicago, B.S., 2020-2021, Next: Ph.D. student at Stanford University

Johnny Hwang University of Chicago, B.S., 2020 (with **Aaron Elmore**), Next: Quantitative Developer at Arrowstreet Capital

Ikraduya Edian Bandung Institute of Technology, B.S., 2020-2022 (with **Aaron Elmore**), Next: M.S. at the University of Edinburgh

Leadership, Service, & Extracurricular Activities

PROFESSIONAL MEMBERSHIPS

Association of Computing Machinery (**ACM**)

Lifetime member

Association for the Advancement of Artificial Intelligence (**AAAI**)

Lifetime member

Institute of Electrical and Electronics Engineers (**IEEE**)

Member (since 2022)

UNIVERSITY SERVICE

OSU CSE Graduate Admissions Committee

2022, 2023

OSU Data I/O Hackathon Judge

2022

CONFERENCE ORGANIZATION

ACM Student Research Competition (SRC) Committee

ACM SIGMOD 2023

Proceedings Chair

ACM SIGMOD 2022

Availability & Reproducibility Committee

ACM SIGMOD 2021, 2022, 2023

“Best Demo” Award Committee

VLDB 2019

CONFERENCE PROGRAM COMMITTEE (PC) MEMBER

Databases & Data Analytics

ACM SIGMOD Conference on Management of Data (**SIGMOD**)

2021, 2023, 2024

International Conference on Very Large Data Bases (**VLDB**)

2019 (Demo Track), 2023

IEEE International Conference on Data Engineering (**ICDE**)

2019 (Demo Track), 2020, 2022, 2023

IEEE International Conference on Big Data (**BigData**)

2021, 2022, 2023

Data Mining

ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**SIGKDD**) 2023

Artificial Intelligence

International Joint Conference on Artificial Intelligence (**IJCAI**)
AAAI Conference on Artificial Intelligence (**AAAI**)

2020 (**Senior PC**), 2021 (**Senior PC**), 2022, 2023
2022, 2023

Machine Learning

International Conference on Machine Learning (**ICML**)
Neural Information Processing Systems (**NeurIPS**)
International Conference on Learning Representations (**ICLR**)

2020, 2021, 2022, 2023
2021, 2022, 2023
2021, 2022, 2023

INVITED REVIEWER FOR JOURNALS

IEEE Transactions on Knowledge and Data Engineering (**TKDE**)
The Very Large Data Bases Journal (**VLDBJ**)
ACM Transactions on Internet Technology (**ACM TOIT**)
Data Mining and Knowledge Discovery (**DMKD**)
Knowledge and Information Systems (**KAIS**)
Distributed and Parallel Databases Journal (**DAPD**)
Pattern Recognition
Artificial Intelligence (**AI**) Journal
Transactions on Machine Learning Research (**TMLR**)
IEEE Transactions on Neural Networks and Learning Systems (**IEEE TNNS**)
Technometrics
Quantitative Finance
Journal of Information Science
Information Sciences
ACM Transactions on Computing for Healthcare (**HEALTH**)
Journal of Medical Internet Research (**JMIR**)
IEEE Journal of Biomedical and Health Informatics (**JBHI**)
IEEE/CAA Journal of Automatica Sinica
IEEE Access
Sensors

LEADERSHIP AND OTHER ACTIVITIES

UChicago Match Program, I participated in internship and advising programs for students from 2020-2022 underrepresented, low-income, or first-generation backgrounds. I advised and offered paid research positions to Odyssey Scholars, Empower Scholars, and Metcalf Fellows. *UChicago*

Provost's Office Postdoc Advisory Board, Communicated issues and coordinated efforts for 2019-2022 improving international affairs, diversity initiatives, and entrepreneurship IP conflicts. *UChicago*

2019-2022 **PSD Postdoc Representative** at the Physical Sciences Division. *UChicago*

2016, 2018 "**CS Service**" **Awards**, Organized social events and reviewed M.S. applications. *Columbia*

2008-2009 **ACM AUTH Student Chapter**, Founder of the chapter (2008) and President from 2008 to 2009. *AUTH*

Selected Press & Media Coverage

2020	"Digital Biomarkers Supersede Theranos: No Blood, No Jokes"	<i>Forbes</i>
2018	"Real-world evidence: From activity to impact in healthcare decision making"	<i>McKinsey & Company</i>
2017	"One nation divided by a common language"	<i>Fast Company</i>
2016	"Can you really spot cancer through a search engine?"	<i>MIT Technology Review</i>
2016	"Is it cancer? Diagnosing yourself online is about to get easier"	<i>The Guardian</i>
2016	"What happens when your search engine is first to know you have cancer"	<i>The Washington Post</i>
2016	"Microsoft finds cancer clues in search queries"	<i>The New York Times</i>

References

Aaron Elmore Associate Professor of Computer Science at the **University of Chicago**

Christos Faloutsos Fredkin Professor of Computer Science at **Carnegie Mellon University** and an **Amazon Scholar**

Michael Franklin Liew Family Chair of Computer Science and Co-Director of the Data Science Institute at the **University of Chicago** (Previously, Thomas M. Siebel Professor and Chair of Computer Science Division at **UC Berkeley**)

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