

Suleyman Uludag

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Educational Experience

- Ph.D. in Computer Science** *June 2007*
[School of Computer Science, Telecommunications and Information Systems,](#)
[DePaul University,](#) Chicago, IL USA
- M.Sc. in Computer Science in Telecommunication Systems,** *December 1996*
[School of Computer Science, Telecommunications and Information Systems,](#)
[DePaul University,](#) Chicago, IL USA
- M.B.A. in Operations Management,** *December 1992*
[Stuart School of Business,](#)
[Illinois Institute of Technology,](#) Chicago, IL USA
- B.A. in Business Administration in Finance,** *June 1991*
[Faculty of Business Administration,](#)
[Marmara University,](#) Goztepe, Istanbul, Turkey

Professional Experience

- Professor, [The University of Michigan - Flint](#), MI** *September 2022 - Present*
[College of Innovation & Technology \(CIT\).](#)
- Accreditation Director, [The University of Michigan - Flint](#), MI** *July 2022 - Present*
[College of Innovation & Technology \(CIT\).](#)
- Associate Professor, [The University of Michigan - Flint](#), MI** *September 2012 - August 2022*
[Department of Computer Science, Engineering and Physics.](#)
- Fulbright Scholar and Visiting Professor,** *September 2018 - August 2019*
[The University of Sarajevo,](#) Sarajevo, Bosnia & Herzegovina
[Faculty of Electrical Engineering.](#)
- Interim Associate Chair, [The University of Michigan - Flint](#), MI** *December 2017 - June 2018*
[Department of Computer Science, Engineering and Physics.](#)
- Affiliated Faculty, [The University of Michigan, Ann Arbor](#), MI** *February 2016 - Present*
[Michigan Institute for Data Science \(MIDAS\)](#)
- Visiting Associate Professor,**
The Union of Chambers and the Commodity Exchanges
of Turkey (TOBB),
[Economics & Technology University \(ETU\)](#) Ankara, Turkey *May - Aug 2015, May - Aug 2016*
[Department of Electrical and Electronics Engineering.](#)
- Visiting Scholar, [The University of Illinois at Urbana-Champaign](#), IL** *August 2013 - August 2014*
[Information Trust Institute \(ITI\), Trustworthy Cyber Infrastructure for](#)
[the Power Grid \(TCIPG\), MONET Research Group at the](#)
[Department of Computer Science under Professor Klara Nahrstedt.](#)
- Fulbright Scholar and Visiting Associate Professor,**
The Union of Chambers and the Commodity Exchanges of Turkey,
[Economics and Technology University \(ETU\)](#) Ankara, Turkey *September 2012 - August 2013*

¹All text in this CV in [blue font color](#) is clickable to take the reader directly to the corresponding Web site.

Department of Computer Engineering.

Assistant Professor, [The University of Michigan - Flint, MI](#)
Department of Computer Science, Engineering and Physics.

August 2006 - August 2012

Adjunct Faculty, [DePaul University, Chicago, IL](#)
School of Computer Science, Telecommunications and Information Systems.

January 1998 - June 2006

Instructor, [Illinois Institute of Technology, Chicago, IL](#)
Information Technology Certificate Program

June 1997 - November 1997

Creative and/or Scholarly Work

Research Interest Synopsis

Secure data collection, denial-of-service mitigation, Internet-of-Things security, post-quantum cryptography, blockchain, software-defined networking, smart grid communications, Smart Grid privacy, demand response bidding privacy, applied cryptography, Smart Grid privacy, Denial-of-Service in the Smart Grid, cybersecurity education and curriculum development, routing and channel assignment in Wireless Mesh Networks, Quality-of-Service (QoS) routing in wired and wireless networks, topology aggregation, statistical guarantees and stochastic shortest path algorithms in data networks, probabilistic modeling of Internet link metrics, distributed recovery in mobile sensor and actor networks, introducing programming to non-CS majors, teaching networks.

[Links to my Google Scholar Citation page and ResearchGate Profile.](#)

Refereed Publications

The URLs (links) below in [sea blue font color](#) are active and you can click on them to see the Digital Library where the corresponding paper is published. The names of the student co-authors are highlighted in [blue font](#).

- [1] S. W. Turner, [Tyler E Judd](#), and S. Uludag, "Experience implementing an automated assessment system for accreditation," in *13th Flint Student Research Conference (SRC)*, Flint, Michigan, May 2024, *Abstract accepted. Pending review for the full paper*.
- [2] [Tyler E Judd](#), H. Bisgin, [Mohammad Derani](#), [Alvin Huseinović](#), and S. Uludag, "Coalescing research into modular and safe educational cybersecurity labs with AI solutions," in *13th Flint Student Research Conference (SRC)*, Flint, Michigan, May 2024, *Poster*.
- [3] [Michael Knox](#), C. Tang, H. Bisgin, M. Mani, and S. Uludag, "Understanding the transfer of knowledge in introductory programming classes," in *13th Flint Student Research Conference (SRC)*, Flint, Michigan, May 2024, *Oral Presentation*.
- [4] S. W. Turner, [Tyler E Judd](#), and S. Uludag, "Experience implementing an automated assessment system for accreditation," in *2024 IEEE Frontiers in Education Conference (FIE) (FIE 2024)*, Washington, USA, Oct. 2024, p. 9, *Abstract accepted. Pending review for the full paper*.
- [5] [Tyler E Judd](#), H. Bisgin, [Mohammad Derani](#), [Alvin Huseinović](#), and S. Uludag, "Coalescing research into modular and safe educational cybersecurity labs with AI solutions," in *2024 IEEE Frontiers in Education Conference (FIE) (FIE 2024)*, Washington, USA, Oct. 2024, p. 9, *Abstract accepted. Pending review for the full paper*.
- [6] [Michael Knox](#), C. Tang, H. Bisgin, M. Mani, and S. Uludag, "Understanding the transfer of knowledge in introductory programming classes," in *2024 IEEE Frontiers in Education Conference (FIE) (FIE 2024)*, Washington, USA, Oct. 2024, p. 9, *Abstract accepted. Pending review for the full paper*.
- [7] [Ali Berkay Gorgulu](#), [Huseyin Ozgur Kamali](#), M. Karakus, E. Guler, and S. Uludag, "A proof of concept for Blockchain-Enhanced smart parking system with SDN: BePaS," in *2024 IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom) (IEEE BlackSeaCom 2024)*, Tbilisi, Georgia, Jun. 2024, p. 7.87.

- [8] Nathan Dai and S. Uludag, “Performance Tradeoff in ML-Based Intrusion Detection Systems for IoT Devices: Efficacy vs. Resource Usage,” in *2024 IEEE 21st Consumer Communications & Networking Conference (CCNC) (CCNC 2024)*, Las Vegas, USA, January.
- [9] Turner, Stephen W. and Judd, Tyler and Moore, Aaron and Uludag, Suleyman, “A Framework for an Automated Assessment System,” in *The 9th IEEE International Symposium on Accreditation of Engineering and Computing Education (ICACIT)*, Lima, Peru, November 2023.
- [10] Karakus, Murat and Guler, Evrim and Uludag, Suleyman, “Unlocking New Horizons: SDN and Blockchain Synergy in IOT Networks,” in *The IEEE International Mediterranean Conference on Communications and Networking (MeditCom) Tutorials*, Dubrovnik, Croatia, September 2023. [Online]. Available: <https://meditcom2023.ieee-meditcom.org/program-overview/tutorials>
- [11] Brenton Poke and S. Uludag, “Empirical evaluation of a LoRa mesh network for emergency communication systems,” in *2023 IEEE 14th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON) (IEEE UEMCON 2023)*, New York, USA, October 2023.
- [12] M. Karakus, E. Guler, and S. Uludag, “SmartContractChain (SC^2): Cross-ISP QoS traffic management framework with SDN and blockchain,” *Peer-to-Peer Networking and Applications*, pp. 1–18, October 2023. [Online]. Available: <https://link.springer.com/article/10.1007/s12083-023-01561-2>
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- [20] E. Guler, M. Karakus, and S. Uludag, “SpectrumChain: An Efficient Spectrum Management Framework in Blockchain-Enabled Flexible SDONs,” in *2022 IEEE International Conference on Communications (ICC)*, Seoul, South Korea, May 2022. [Online]. Available: <https://ieeexplore.ieee.org/document/9838747>

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- [22] Jared Miller and S. Uludag, “Energy-Efficiency framework for Fixed-Wing UAV communications with variable altitude,” in *WS04 IEEE ICC 2021 4th IEEE ICC Workshop on Integrating UAVs into 5G and Beyond (WS04 ICC’21 Workshop - UAV-5G)*, Montreal, Canada, June 2021. [Online]. Available: <https://ieeexplore.ieee.org/document/9473819>
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Grants

National Science Foundation

Secure & Trustworthy Computing (SaTC) Grant Proposal *to be submitted in Fall 2024*

SaTC: Small: RUI: Developing Defense Against
Adversarial Attacks Against the Power Grid Using
Machine Learning , \$480,000

National Science Foundation

Secure & Trustworthy Computing (SaTC) Grant Proposal *to be submitted in Fall 2024*

SaTC: Small: RUI: Collaborative Research:
Security-Performance Tradeoffs in Post-Quantum
Blockchain for Interdomain Traffic in Softwarized
Networks, \$500,000

National Science Foundation

EAGER Grant Proposal *submitted in July 2023*

Education DCL: EAGER: RUI: SaTC: Bridging
the Gap: Coalescing Research into Educational
Lab Exercises for the Application of Machine
Learning Methodologies to Cybersecurity Threats
, \$500,000, Rejected

Research and Creative Activity Fund

June 2021

Co-PI for Developing Defense Against Adversarial Attacks Against the Power Grid
Using Machine Learning, funded by the Office of Research at the UMF with Dr.
Halil Bisgin, \$19,856

Proposal Writing Academies Award

May 2021 - August 2021

\$8000 by the UM-F Office of Research.

The Summer Undergraduate Research Experience (SURE) Grant

May 2021 - August 2021

Awarded \$5000 by the UM-F Office of Research.

Research and Creative Activity Fund

May 2018, declined

Co-PI for Performance Evaluation of Lightweight Cryptographic Primitives in
Resource-Constrained Internet-of-Things Devices, by the Office of Research at the
UMF with Dr. Halil Bisgin, \$17,456

National Science Foundation

Cyber-Physical Systems Program Grant Proposal *submitted in May 2018, declined*

CPS: Small: RUI: Collaborative Research: Coding
Theory based Cryptography for the Smart Grid,
\$499,000

The Summer Undergraduate Research Experience (SURE) Grant

May 2018 - August 2018

Awarded \$4000 by the UM-F Office of Research (funded by the C.S. Mott Founda-
tion) that involved 3 undergraduate students in research; joint work with Dr.
Halil Bisgin.

TUBITAK (Turkish NSF) Visiting Scientist Grant

Apr - Aug 2016

\$4,650

Provost's 60th Anniversary Research Grant

Fall 2016 - Winter 2017

TUBITAK (Turkish NSF) Visiting Scientist Grant

May - Sep 2015

\$4,800

Research and Creative Activity Fund

May 2012 - April 2013

PI for Target Tracking in 3D Wireless Sensor Networks, funded by the Office of Research at the UMF, \$7,800

UMF Technology Fee Hardware Grant

April 2011

Awarded funds to purchase LEGO robotics and Android smartphones as part of programming classes and new mobile applications courses \$6,875

- UMF Thomson Center for Learning and Teaching Faculty Development Grant** *December 2010*
 Awarded money to purchase LEGO robotics and Android smartphones as part of programming classes and new mobile applications courses \$1,500.
- UMF Technology Fee Hardware Grant** *April 2010*
 To purchase a high-end server to teach virtualization and cloud computing in networking classes. \$4,000
- The Cisco Collaborative Research Initiative** *June 2007 - December 2008*
 co-PI, "Network Parameter Representation and Quality of Service Routing in the Internet", \$95,000
- Research and Creative Activity Fund** *May 2007 - April 2008*
 PI for Quality of Service Geographic Routing in Wireless Sensor Networks, funded by the Office of Research at the UMF, \$11,600
- Research and Creative Activity Fund,** *January 2007 - January 2008*
 co-PI for Global Supply Chain Collaboration Network Project, funded by the CSC 391 - Independent Study Office of Research at the UMF and the School of Management, \$20,000
- Pedagogical Fellowship Grant,** *Summer 2007*
 By the Thomson Center for Teaching and Learning at UMF, \$3,000

Teaching Experience

Courses Taught

I have always developed my own teaching material for all my courses, including slides, homeworks, exams, labs, etc. I have shared my teaching material with everyone who asked for it, including slides, homeworks, labs, exams, peer assessment rubrics, syllabi, etc. Many of my developed materials are used by many faculty in the department. Here is a list of courses I taught/developed:

- CSC 101 - Fluency in Information Technology and Computing (Undergrad, UM-Flint)
- CSC 122 - Intro to Programming (Undergrad, UM-Flint)
- CSC 127 Using a Unix Computer System (Undergrad, UM-Flint)
- CSC 175 - Problem Solving & Programming I (Undergrad, UM-Flint)
- CSC 275 - Problem Solving & Programming II (Undergrad, UM-Flint)
- CSC 276 - Problem Solving & Programming in Java II (Undergrad, UM-Flint)
- CIS 335 - Business Telecommunication and Computer Networks (Undergrad, UM-Flint)
- CSC 335 - Computer Networks - I (Undergrad, UM-Flint)
- CSC 370 - Introduction to Information Security - I (Undergrad, UM-Flint)
- CSC 378 - Network Security and Cryptography (Undergrad, UM-Flint)
[Developed the material but the class canceled twice for low enrollment; handed the class design, content and the material to another faculty for Fall 2018]
- CSC 391 - Independent Study (Undergrad, UM-Flint)
- CIS 401 - Internship in Computer Information Systems (Undergrad, UM-Flint)
- CSC 525 Wireless and Mobile Computing (Graduate, UM-Flint)
- CSC 535 - Advanced Computer Networks (Graduate, UM-Flint)
- CIS 550 - Decision Support Systems (Graduate, UM-Flint)

- ETF RII TS 5955 Computing and Informatics Security Technologies (Undergraduate, University of Sarajevo, Faculty of Electrical Engineering) *[pending]*

- BIL 425 - Software Development for Mobile Apps (Android) (Undergrad, TOBB University of Economics and Technology, Ankara, Turkey)
- BIL 447 - Introduction to Communications Infrastructure of Smart Grids (Undergrad, TOBB University of Economics and Technology, Ankara, Turkey)
- BIL 547 - Advanced Communications Infrastructure of Smart Grids (Graduate, TOBB University of Economics and Technology, Ankara, Turkey)

- TDC362 - Principles of Data Communications (Undergraduate, DePaul U., Chicago, IL)
- TDC363 - Introduction to Local Area Networks (Undergraduate, DePaul U., Chicago, IL)
- TDC462 - Data Communications (Graduate, DePaul U., Chicago, IL)
- TDC511 - Telecommunications Practicum (Graduate, DePaul University, Chicago, IL)

Pedagogical Grants

National Science Foundation

Secure & Trustworthy Computing (SaTC-EDU) Grant Proposal *to be submitted in Fall 2024*

SaTC: Small: RUI: Bridging the Gap: Coalescing
Research into Educational Lab Exercises for the
Application of Machine Learning Methodologies
to Cybersecurity Threats , \$480,000

UMF Technology Fee Hardware Grant

April 2011

Awarded funds to purchase LEGO robotics and Android smartphones as part of
programming classes and new mobile applications courses \$6,875

UMF Thomson Center for Learning and Teaching Faculty Development Grant *December 2010*

Awarded money to purchase LEGO robotics and Android smartphones as part of
programming classes and new mobile applications courses \$1,500.

UMF Technology Fee Hardware Grant

April 2010

To purchase a high-end server to teach virtualization and cloud computing in net-
working classes. \$4,000

Pedagogical Fellowship Grant

Summer 2007

By the Thomson Center for Teaching and Learning at UMF, \$3,000

TCLT Pedagogical Fellowship

Spring/Summer 2007

Course Redesign: Design of Intensive Labs for CIS 335 Topics by Thomson Center for Teaching and
Learning

[Link to TCLT Fellowships](#)

Pedagogical Grant Panelist

**Panelist for NSF SaTC-EDU (Secure and Trustworthy
Cyberspace (SaTC) Education designation)**

January 2020

**Panelist for US Department of Energy, Solar Energy Technologies Office (SETO),
Improving and Expanding the Solar Industry through Workforce Initiatives** *Jun - Aug 2018*

Panelist for NSF IUSE (Improving Undergraduate STEM Education) *May 2014*

**Panelist for Graduate Assistance in Areas of National Need (GAANN)
Peer Review Process for U.S. Department of Education** *May 2012*

**Panelist Reviewer for NSF Scholarship for Service (SFS) Program
Division of Undergraduate Education** *May 2012*

**Panelist Reviewer for NSF Transforming Undergraduate Education in Science,
Technology, Engineering and Mathematics (TUES) Program** *July 2010*

Technical Program Committee Member and Reviewer for Pedagogical Conferences *2007 - present*

Too many to list all, including

ACM Association for Computing Machinery's Special Interest Group on Computer Science Education
(SIGCSE),

ACM Special Interest Group for Information Technology Education (SIGITE),

ACM The Innovation and Technology in Computer Science Education conference (ITiCSE) Conference,

IEEE Global Engineering Education Conference
IEEE Frontiers in Education conference (FIE), etc.

Pedagogical Conferences attended to present papers

IEEE Frontiers in Education conference (FIE) 2014 (2 papers),
IEEE Frontiers in Education conference (FIE) 2013 (2 papers),
IEEE Frontiers in Education conference (FIE) 2012,
IEEE Int'l Conf. on Information Technology Based Higher Education and Training (ITHET) 2012 (2 papers),
IEEE Frontiers in Education conference (FIE) 2010,
ACM Special Interest Group for Information Technology Education (SIGITE) 2011,
[**MERITORIOUS PAPER AWARD**]

Student Research Supervision

I have 66 non-unique (*that is, same student publishing twice with me counts 2*) and 41 unique student co-authors in peer-reviewed publications. The names of the student co-authors are highlighted in **blue font** below under *Pedagogical Publications* on page **15** and *Creative and/or Scholarly Work* section on page **2**. I have had many UROP and GSRA undergrad and graduate students for research projects. I have been awarded two SURE (Summer Undergraduate Research Experience) grants at the UM-Flint in the summer of 2018 and 2021.

I have served on 1 M.Sc. thesis committee (U of Hong Kong) and 1 Ph.D. committee (TOBB ETU). I am now serving on a Ph.D. committee at the Department of Computer Science of the University of Illinois at Urbana-Champaign as well as supervising a dissertation at the Faculty of Electrical Engineering at the University of Sarajevo, Sarajevo, Bosnia and Herzegovina.

Pedagogical Publications

The following is the *subset* of my publications² in *only* peer-reviewed, **pedagogical research conference/journals**. I have attended all of these conferences and presented the papers and chaired sessions in some. *The URLs (links) below in sea blue font color are active and you can click on them to see the Digital Library where the corresponding paper is published. The names of the student co-authors are highlighted in blue font.*

- [1] S. W. Turner, **Tyler E Judd**, and S. Uludag, "Experience implementing an automated assessment system for accreditation," in *13th Flint Student Research Conference (SRC)*, Flint, Michigan, May 2024, *Abstract accepted. Pending review for the full paper.*
- [2] **Tyler E Judd**, H. Bisgin, **Mohammad Derani**, **Alvin Huseinović**, and S. Uludag, "Coalescing research into modular and safe educational cybersecurity labs with AI solutions," in *13th Flint Student Research Conference (SRC)*, Flint, Michigan, May 2024, *Poster.*
- [3] **Michael Knox**, C. Tang, H. Bisgin, M. Mani, and S. Uludag, "Understanding the transfer of knowledge in introductory programming classes," in *13th Flint Student Research Conference (SRC)*, Flint, Michigan, May 2024, *Oral Presentation.*
- [4] S. W. Turner, **Tyler E Judd**, and S. Uludag, "Experience implementing an automated assessment system for accreditation," in *2024 IEEE Frontiers in Education Conference (FIE) (FIE 2024)*, Washington, USA, Oct. 2024, p. 9, *Abstract accepted. Pending review for the full paper.*
- [5] **Tyler E Judd**, H. Bisgin, **Mohammad Derani**, **Alvin Huseinović**, and S. Uludag, "Coalescing research into modular and safe educational cybersecurity labs with AI solutions," in *2024 IEEE Frontiers in Education Conference (FIE) (FIE 2024)*, Washington, USA, Oct. 2024, p. 9, *Abstract accepted. Pending review for the full paper.*

²The full list of my publications, including the pedagogical publications below, is given starting on page **2**.

- [6] Michael Knox, C. Tang, H. Bisgin, M. Mani, and S. Uludag, "Understanding the transfer of knowledge in introductory programming classes," in *2024 IEEE Frontiers in Education Conference (FIE) (FIE 2024)*, Washington, USA, Oct. 2024, p. 9, *Abstract accepted. Pending review for the full paper.*
- [7] H. Bisgin, M. Mani, and S. Uludag, "Delineating factors that influence student performance in a data structures course," in *2018 IEEE Frontiers in Education Conference (FIE)*, Oct 2018, pp. 1–9. [Online]. Available: <https://ieeexplore.ieee.org/abstract/document/8659300>
- [8] M. Mani, S. Uludag, and Zolinski, Christopher, "On Evaluating the Use of Zachman Framework in Computer Science and Information Systems Classes," *Journal of Computing Sciences in Colleges*, vol. 31, no. 1, pp. 47–59, Oct 2015. [Online]. Available: <http://dl.acm.org/citation.cfm?id=2831373.2831382>
- [9] T. Yardley, S. Uludag, K. Nahrstedt, and P. Sauer, "Developing a smart grid cybersecurity education platform and a preliminary assessment of its first application," in *2014 IEEE Frontiers in Education Conference (FIE) Proceedings*, Oct 2014, pp. 1–9. [Online]. Available: <http://ieeexplore.ieee.org/document/7044273/>
- [10] S. Uludag, P. Sauer, K. Nahrstedt, and T. Yardley, "Towards designing and developing curriculum for the challenges of the smart grid education," in *2014 IEEE Frontiers in Education Conference (FIE) Proceedings*, Oct 2014, pp. 1–8. [Online]. Available: <http://ieeexplore.ieee.org/document/7044469/>
- [11] S. W. Turner and S. Uludag, "Student Perceptions of Cheating in Online and Traditional Classes," in *2013 Frontiers in Education Conference (FIE 2013)*. Oklahoma City, USA: IEEE, Oct 2013, pp. 1131–1137. [Online]. Available: <http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=6685007>
- [12] S. Uludag, F. Demirci, E. Dogdu, Aydos, Fahri, and M. F. Demirci, "Pedagogical Analysis and Multifaceted Evaluation of an Engineering Co-op Program," in *2013 Frontiers in Education Conference (FIE 2013)*. Oklahoma City, USA: IEEE, Oct 2013, pp. 438–444. [Online]. Available: <http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=6684863>
- [13] S. Uludag, Murat Karakus, Evrim Guler, S. W. Turner, and Afelete Kita, "Assessment of a frugal, virtual and green computing lab infrastructure of the future," in *2012 Frontiers in Education Conference Proceedings*, Seattle, WA, USA, Oct 2012, pp. 1–6. [Online]. Available: <http://ieeexplore.ieee.org/document/6462470/>
- [14] Guler, Evrim, S. Uludag, Karakus, Murat, and S. W. Turner, "Virtualized Lab Infrastructure On a Budget for Various Computing and Engineering Courses," in *Proceedings of the 11th International Conference on Information Technology Based Higher Education and Training (IHTET '12)*. Istanbul, Turkey: IEEE, Jun 2012, pp. 1–7. [Online]. Available: <http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=6246028>
- [15] Karakus, Murat, S. Uludag, Guler, Evrim, S. W. Turner, and A. Ugur, "Teaching computing and programming fundamentals via App Inventor for Android," in *2012 International Conference on Information Technology Based Higher Education and Training, IHTET 2012*. IEEE, Jun 2012, pp. 1–8. [Online]. Available: <http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=6246020>
- [16] S. Uludag, Guler, Evrim, Karakus, Murat, and S. W. Turner, "An affordable virtual laboratory infrastructure to complement a variety of computing classes," *Journal of Computing Sciences in Colleges*, vol. 27, no. 5, pp. 158–166, May 2012. [Online]. Available: <http://dl.acm.org/citation.cfm?id=2168874.2168912>
- [17] S. Uludag, Karakus, Murat, and S. W. Turner, "Implementing IT0/CS0 with scratch, app inventor for android, and lego mindstorms," in *Proceedings of the 2011 conference on Information technology education - SIGITE '11*, ser. SIGITE '11. New York, New York, USA: ACM Press, Oct 2011, p. 183. [Online]. Available: <https://dl.acm.org/citation.cfm?id=2047645>
- [18] S. Uludag and McBride, Brian, "Teaching Networking Concepts through Bluetooth Software Implementation," in *2010 IEEE Frontiers in Education Conference (FIE)*. IEEE, Oct 2010,

pp. F4F—1—F4F—2. [Online]. Available: <http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=5673191>

Awards and Recognitions

Fulbright U.S. Scholar Program Core Award

August 2018 - July 2019

To teach and research at the Faculty of Electrical Engineering,
University of Sarajevo, Sarajevo, Bosnia & Herzegovina.

<https://www.cies.org/grantee/suleyman-uludag-0>

Fulbright U.S. Scholar Program Core Award

September 2012 - June 2013

To teach and research at the Department of Computer Engineering,
The Union of Chambers and the Commodity Exchanges of Turkey (TOBB)
Economics and Technology University (ETU) Ankara, Turkey.

<https://www.cies.org/grantee/suleyman-uludag>

Lois Matz Rosen Junior Faculty Excellence in Teaching Award

April 2010

University level teaching excellence award.

Golden Apple Teaching Recognitions

many semesters...

Service

Program Service

Advisor to ACM and UPE Student Clubs	<i>June 2021 - Present</i>
Equipment Replacement Committee	<i>Fall 2021</i>
Equipment Replacement Committee	<i>Fall 2021</i>
RADRAJ and FRCSIS Scholarship Committee Chair	<i>2015 - Present</i>
Committee Chair for 1 staff annual evaluation	<i>Winter 2018</i>
Committee Chair for 4 faculty contract renewals	<i>Winter 2018</i>
Committee Chair for 3 4-year reviews	<i>Winter 2018</i>
Committee Chair for 1 2-year review	<i>Winter 2018</i>
Committee Chair for 2 Major (one with remediation) and 1 Interim LEO reviews	<i>Winter 2018</i>
Faculty Award Nominations Letters for three faculty members	<i>Winter 2018</i>
Graduate Scholarship and GSRA Committee Chair	<i>Winter/Spring 2018</i>
MS CSIS Graduate Admission Committee (read 650+ applications)	<i>May 2017 - June 2019</i>
2017 Interim Review for the MS-CSIS Program	<i>December 2017 - April 2018</i>
Chair of Subcommittee to update CSC 175/275/276/275 curricula	<i>Sep 2016 - Apr 2017</i>
Chair of Subcommittee to update Systems/Networking/Security tracks	<i>Sep 2016 - Apr 2017</i>
Capstone Reviewer	<i>April 2016</i>
Chair of Computer Science Faculty Search Committee	<i>September 2015 - July 2016</i>
Tenure and Promotion Committee Member	<i>Fall 2013 - present</i>
2-year and 4-yr Review Committee Member	<i>2013 - 2017</i>
Chair of CS Faculty Search Committee	<i>June - December 2011</i>
Chair of Computer Science Faculty Search Committee	<i>January 2011 - April 2011</i>
Chair of Computer Information Systems Program Update Committee	<i>May 2009 - Jun 2009</i>
Chair of General Education Course Designation Committee for CS and CIS courses	<i>May 2009 - Jun 2010</i>
Chair of Computer Information Systems Program Update Committee	<i>May 2009 - Jun 2009</i>
Chair of General Education Course Designation Committee for CS and CIS courses	<i>May 2009 - Jun 2011</i>
Chair of CSESP Infrastructure Committee	<i>Winter 2008</i>
CS Faculty Search Committee	<i>Winter 2008</i>
High School Programming Contest Organization Committee	<i>Winter 2007 - Winter 2008</i>
MS CSIS Exit Exam Reviewer	<i>Fall 2007 - Winter 2016</i>

Departmental Service

Committee Chair for 5 faculty annual reviews	<i>Winter 2018</i>
Committee Member for 2 staff annual evaluation	<i>Winter 2018</i>
CSEP Interim Associate Chair	<i>December 2017 - June 2018</i>
CSEP Open House Slide Development	<i>October 2015</i>
MS-CIS Graduate Scholarship Committee Chair	<i>Winter 2017 - present</i>
CSEP Undergraduate Scholarship Committee Chair and Member	<i>Winter 2014 - present</i>
Peer Evaluation of CSEP Faculty	<i>2009 - Present</i>
Chair of ELMS Academic Software for students	<i>2009 - Present</i>
Lecturer Reviewer for CSESP	<i>Fall 2007 - present</i>
Online Teaching Policy Committee	<i>Fall 2007</i>
CSESP Assessment Committee	<i>Fall 2007 - Fall 2008</i>
Chair of Freeman Science Scholarship Committee	<i>Winter 2007 - Aug 2012</i>

College Service

Summer Interim Committee	<i>Jul - Aug 2020</i>
Michigan Economic Development Corporation (MEDC)	
Cyber Range Hub Committee	<i>Mar 2018 - present</i>

Council of Chairs Member	<i>Jan - Jun 2018</i>
College Appeals Panel	<i>May 2017 - May 2018</i>
CAS Nominating Committee Chair	<i>Jan 2017 - Dec 2017</i>
College Appeals Panel	<i>May 2016 - May 2017</i>
College Nominating Committee	<i>January 2015 - December 2015</i>

University Service

Member of Urban Sustainability & Environmental Health (USEH) Research Cluster	<i>Sep 2021 - Present</i>
Research Faculty Brainstorming Session Member	<i>Sep 2021 - Present</i>
University Curriculum Committee	<i>May 2021 - May 2024</i>
Connect2U Faculty Outreach Volunteer	<i>Apr - Aug 2021</i>
Budget Committee for Fiscal Year 2019	<i>Feb 2018 - Jun 2018</i>
Witness to a Grievance Committee	<i>Jan 2018</i>
Chancellor's Advisory Committee for Budget and Strategic Planning (CAC/BSP)	<i>Jan 2018 - Jul 2018</i>
Administrative Services Advisory Committee (ASAC)	<i>Oct 2017 - Present</i>
Office of Research, Research Development Series Committee Member	<i>Jun 2017 - Present</i>
HLC Steering Committee (wrote 2 out of 21 components for the Self-Study)	<i>Sep 2016 - Present</i>
Co-chair of HLC 2019 Continued Accreditation Committee, Criteria 5	<i>May 2016 - Present</i>
Technology Committee	<i>September 2015 - June 2018</i>
UMF Honors Council	<i>September 2014 - December 2015</i>
U of Michigan Road Scholar	<i>Jan 2012 - May 2012</i>
Nominating Committee	<i>September 2011 - August 2014</i>
UMF College Advising Implementation Committee	<i>July 2010 - 2012</i>
UMF Strategic Planning Learning, Scholarship and Professional Dev. Task Force	<i>May 2010 - Aug 2012</i>
General Education Curriculum Advisory Committee	<i>June 2010 - Aug 2012</i>

Professional Service

1. CONFERENCE ORGANIZING COMMITTEE AND TECHNICAL PROGRAM COMMITTEE

Technical program committee for IEEE ICC'19 - SAC-9 SGC Track (2019 IEEE International Conference on Communications (ICC): SAC Smart Grid Communications Track)

Student Grants Chair for the 2019 IEEE 44th Conference on Local Computer Networks (LCN) Osnabrück, Germany, 13-17 October 2019,

Corporate Relationship Chair for IEEE Local Computer Networks (LCN) 2018, Chicago, IL Oct 2-4 2018,

IEEE Global Engineering Education Conference (EDUCON 2017),

International Conference on Smart Cities and Green ICT Systems (SMARTGREENS) 2015-2018,

Workshop Chair, IEEE Local Computer Networks (LCN) Smart Grid Networking Infrastructure 2010-2011,

IEEE International Communications Conference (ICC) 2010 - 2018,

IEEE International Conference on Computer Communications and Networks (ICCCN) 2009 - 2018,

International Symposium on Information, communication and automation technologies (ICAT) 2017,

International Conference on Advanced Engineering Technologies (ICADET) 2017,

IEEE/IFIP Network Operations and Management Symposium (NOMS) 2015-2018,

IEEE Global Communications Conference (GLOBECOM) 2011-2018,

ACM Special Interest Group on Computer Science Education SIGCSE 2013-2016,

International Conference on Broadband Communications, Networks, and Systems (BROADNETS) 2009,

IEEE Communications and Networking Symposium of Canadian Conference on Electrical and Computer Engineering - CCECE 2009,

2. PEER REVIEWER FOR ACCREDITATION AND SCHOLARSHIP AWARDS

Panelist for US Department of Education,
 Graduate Assistance in Areas of National Need (GAANN) 2018,
 Fulbright Scholar Peer Review Committee, 2015 - present,
 ABET Program Evaluator (Computing Accreditation Commission - CAC), 2013 - present,
 ABET Commissioner and Team Chair (Computing Accreditation Commission - CAC), 2022 - present,
 Panelist for US Dept. of Education, Graduate Assistance in Areas of National Need (GAANN) 2012,

3. PANELISTS AND REVIEWER FOR GRANT PROPOSALS

Proposal Reviewer for US Department of Energy, Advanced Research Projects Agency – Energy (ARPA-E),
 OPEN 2021 Funding Opportunity Announcements (FOAs) March - May 2021,
 Moderator for NSF SaTC Town Hall Apr 2021,
 Panelist for US Department of Energy, Solar Energy Technologies Office (SETO),
 Improving and Expanding the Solar Industry through Workforce Initiatives Jun - Aug 2018,
 Panelist for National Science Foundation (NSF) Secure and Trustworthy Cyberspace (SaTC), 2017,
 Panelist for National Science Foundation (NSF) Smart and Autonomous Systems (S&AS), 2017,
 Grant Proposal Reviewer for Natural Sci. and Eng. Research Council of Canada (NSERC), 2016-present,
 Panelist and grant proposal reviewer for
 The Scientific and Technological Research Council of Turkey (TUBITAK) 2013-present,
 Panelist for National Science Foundation (NSF) Scholarship for Service (SFS), 2012,
 Panelist for National Science Foundation (NSF) Transforming Undergraduate Education (TUES), 2010,

4. CONFERENCE SESSION CHAIR

IEEE Local Computer Networks, 2018,
 IEEE International Communications Conference (ICC) 2015,
 IEEE/ASEE Frontiers in Education 2013,
 IEEE International Communications Conference (ICC) 2009,
 IEEE Wireless Communications and Networking Conference, 2008,
 IEEE Local Computer Networks, 2008,

5. REVIEWER FOR JOURNALS AND BOOK CHAPTERS

Elsevier Computer Communications Journal,
 Elsevier Ad Hoc Networks Journal,
 IEEE Sensors Journal,
 Elsevier Journal of Energy Policy,
 Elsevier Journal of Sustainable Cities and Society,
 IEEE Transactions on Industrial Electronics Journal,
 IEEE Internet of Things Journal,
 IEEE Transactions on Smart Grid Journal,
 IEEE Transactions on Green Communications and Networking Journal,
 IEEE Transactions on Network and Service Management Journal,
 Elsevier Computer Networks Journal,
 Electronics and Telecommunications Research Institute (ETRI) Journal,
 Hindawi International Journal of Distributed Sensor Networks,
 IEEE Communications Letter Journal,
 IEEE Journal of Emerging and Selected Topics in Industrial Electronics,
 IEEE Transactions on Emerging Topics in Computing Journal,
 IEEE Transactions on Multimedia Journal,
 IEEE Transactions on Vehicular Technology Journal,

IEEE Transactions on Computers Journal,
 International Journal of Sensor Networks Journal,
 IEEE Journal in Selected Areas of Communications,
 Korean Society for Internet Information Transactions on Internet and Information Systems Journal,
 MDPI (Multidisciplinary Digital Publishing Institute) Sensors Journal,
 SCIENCE CHINA Information Sciences Journal,
 Wiley Book Chapter reviews for Transportation and Power Grid in Smart Cities: Communication Networks and Services,
 Springer Frontiers of Information Technology & Electronic Engineering Journal,
 Elsevier Journal of Information Security and Applications,
 IEEE Transactions on Industrial Informatics Journal,

6. REVIEWER FOR CONFERENCES

Faculty Judge for Student Poster Competition - Data Science Annual Symposium,
 Oct. 8, 9 MIDAS, U of Michigan Ann Arbor, Oct 2018 ,
 IEEE Consumer Communications & Networking Conference 2008,
 The 6th International Workshop on Cyber Security and Privacy, 2017,
 IEEE International Communications Conference (ICC) 2010 - 2018,
 IEEE International Conference on Computer Communications and Networks (ICCCN) 2009 - 2018,
 IEEE/IFIP Network Operations and Management Symposium (NOMS) 2015-2017,
 ACM Special Interest Group on Computer Science Education SIGCSE 2013-2016,
 International Conference on Broadband Communications, Networks, and Systems (BROADNETS) 2009,
 IEEE Global Communications Conference (GLOBECOM) 2008-2018,
 IEEE Symposium on Computers and Communication (ISCC) 2016,
 IEEE International Conference on Computer Communications (INFOCOM) 2009,
 IEEE Innovation and Technology in Computer Science Education (ITiCSE) 2009-2011,
 IFIP/TC6 NETWORKING Conference 2007,
 25th Queen's Biennial Symposium on Communications 2010,
 ACM Special Interest Group on Information Technology Education SIGITE 2010-12,
 IEEE SmartGridComm Smart Grid Communication Networks Symposium 2012,
 IEEE SoftCOM 2009 17th Conference on Software, Telecommunications and Computer Networks,
 International Conference on Smart Cities and Green ICT Systems (SMARTGREENS) 2015-2018,
 Workshop on Wireless Ad hoc and Sensor Networks (WWASN), 2008-2011,
 IEEE Symposium on Computers and Communication (ISCC) 2016,

7. EDITORIAL

Co-editor of Special issue of Elsevier Ad Hoc Networks Journal, 2014

Community Service (relevant to profession)

Speech on Cybersecurity at the Flint Genesee Chamber Luncheon	<i>Sep 2021</i>
Speech on IoT Security at the North American International Cyber Summit, An event hosted by Gov. Gretchen, UM-Flint News Article link	<i>Oct 2020</i>
Member of Technology and Infrastructure Working GRoup, Michigan Department of Transportation Connected and Autonomous Vehicles Project, https://www.cavnue.com/	<i>Sep 2020 - Present</i>
US Dept of Commerce, NIST, the National Initiative for Cybersecurity Education (NICE), K-12 Working group member	<i>January 2018 - present</i>
First Lego League Coach, Logan Elementary School	<i>Sep 2017 - Present</i>
Michigan Math and Science Academy K-12 Charter School Chief Administrative Officer	<i>Apr 2017 - Present</i>
Michigan Math and Science Academy K-12 Charter School Board Treasurer	<i>Aug 2015 - Present</i>

Michigan Math and Science Academy K-12 Charter School Board Member	<i>Jan 2015 - Present</i>
Michigan Math and Science Academy Science Fair Judge	<i>Dec 2015 - Present</i>
Michigan Math and Science Academy K-12 Charter School Board Member	<i>Feb 2011 - Sep 2012</i>
CONSEF Science and Engineering Fair Judge	<i>Jan 2011 - Apr 2012</i>
Michigan Math and Science Academy Science Fair Judge	<i>Jan 2009 - May 2012</i>
Michigan Math and Science Academy K-8 Charter School Board Treasurer	<i>Feb 2011 - Sep 2012</i>
Michigan Math and Science Academy K-8 Charter School Board Member	<i>Jan 2010 - Sep 2012</i>
Flint Regional Science Fair Judge	<i>Mar 2009 - Apr 2012</i>

Other service

It is hard to classify Fulbright Awards in one of the aforementioned service types. It has a university service component, as well as professional, community, and obviously US national service dimensions.

Fulbright U.S. Scholar Program Core Award

August 2018 - July 2019

To teach and research at the Faculty of Electrical Engineering,
University of Sarajevo, Sarajevo, Bosnia & Herzegovina.

<https://www.cies.org/grantee/suleyman-uludag>

Fulbright U.S. Scholar Program Core Award

September 2012 - June 2013

To teach and research at the Department of Computer Engineering,
The Union of Chambers and the Commodity Exchanges of Turkey (TOBB)
Economics and Technology University (ETU) Ankara, Turkey.

<https://www.cies.org/grantee/suleyman-uludag-0>

Professional Affiliations

ACM Member

1999 - Present

Member of ACM and Special Interest Group on Communications (SIGCOMM),
ACM Special Interest Group on Information Technology Education (SIGITE),
ACM Special Interest Group on Computer Science Education (SIGCSE),
The ACM Computer Science Teachers Association (CSTA).

IEEE Member

1996 - Present

Member of IEEE and Communications Society,
IEEE Big Data Community
Vehicular Technology Society Technical Community on Connected Vehicles,
Cybersecurity Community,
Computer Society Technical Community on Education,
Internet of Things Community,
Computer Society Technical Committee on the Internet,
IEEE Computer Society Technical Committee on Security and Privacy,
Smart Cities Community,
Smart Grid Community,
Computer Society Technical Community on Smart Grid,
Transportation Electrification Community,
Computer Society Membership,
Information Theory Society Membership.