

David Tucker, PhD

Department of Math and
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Education **PhD**, Communications Media and Instructional Technology, 2016
INDIANA UNIVERSITY OF PENNSYLVANIA, Indiana PA

Master of Science, Computer Science, 1999
AMERICAN UNIVERSITY, Washington DC

Bachelor of Science, Math and Physics Education, 1988
EDINBORO UNIVERSITY OF PENNSYLVANIA, Edinboro PA

Select Professional Development:

- Teaching On-Line Certification - though the Pennsylvania State System of Higher Education
 - Graduate Computer Science courses at Kent State University, 2003 - 2006
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**Areas of
Specialization**

- Computer Science Education
- Web Development
- Database & Data Mining
- Networking

**Teaching
& Work
Experience** EDINBORO UNIVERSITY OF PENNSYLVANIA, Edinboro PA 8/01-present
Assistant Professor of Computer Science

- I teach various computer science courses with a focus on web and mobile app. Check my site for a full listing.
- Advising students and department committee work such as systems, curriculum & YIIE cs honor society.
- I also conduct research in computer science education.

THERASSE RENTALS & TAX SERVICES, Edinboro PA. 12/2003 - present
Consultant, hired to set up the office networks and troubleshoot the tax software.

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, Blacksburg Virginia 8/99-8/01
Computer Science Instructor – I taught various computer science courses and general education courses offered through the CS department.

STEPTOE & JOHNSON LLP, Washington D.C. 8/96-8/99
Assistant Manager; Technical Support (4/98 to 8/99)
Programmer/Analyst (8/96 to 4/98)
Primary responsibilities included:

- Web site development and maintenance and server administration. Steptoe's web site is developed using a Notes server, programmed in Lotus Notes/Script and HTML pages includes over 2000 pages, search capabilities and specialized e-mail system.
- Human Resources database administrator. This system used the Repertoire Human Resource software package and Advanced Revelation programming language.
- Backup system administrator for the accounting system.

PRINCE GEORGE COUNTY COMMUNITY COLLEGE, Largo MD 8/95-6/96
Adjunct Faculty

- Responsible for teaching CSIS 114 – Computer Programming I. This is a freshman level course that taught introductory programming concepts. This course was taught using Pascal.

COMPUTER SCIENCES CORPORATION

11/92-8/96

Subsystem Engineer; GOES Program (Greenbelt MD, 4/93 to 8/96)

- Member of a launch team for the GOES 7 & 8 weather satellites.
- Duties include overseeing the thermal subsystem of the spacecraft during the launch and deployment phases. Developed test plans and automated computer scripts that check thermal status.
- Member of a team of programmers that developed and telemetry generating system used as a backup method of sending commands to the spacecraft from the ground station written in Visual Basic.

Engineer; Landsat Program (Lanham MD, 11/92 to 4/93)

- Responsibilities include generation of stored commands, monitor/check spacecraft telemetry.

GEMMA CORPORATION, Arlington VA

11/90-11/92

Programmer/Analyst

- Member of a team of programmers developing a budget analysis software product for NAVAIR.
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**Publications
&
Presentations**

- Tucker, D. (2019). Should Good Students Design Their Own Learning? *IOSSBR International Conference*. New Orleans, LA: International Organization of Social Sciences and Behavioral Research.
- Mason, M., Tucker, D., Reyes-Pabon, C., & Cousino, B. (2017). SLP & Computer Science University Collaboration: Developing a Computerized Billing System for MASLP Students. *ASHA Annual Convention*, (p. Poster). Los Angeles.
- Tucker, D. (2016). *The Phenomenological Exploration of User-Design among Junior Undergraduate Students Majoring in Computer Science in a Medium Size Liberal Arts University When Developing a Game Prototype*. (PhD), Indiana University of Pennsylvania, Indiana PA.
- Dasgupta, A., Tucker, D., & Bennett, D. (2014). *A Study in Computer Spreadsheet Literacy of Incoming College Students*. Paper presented at the Pennsylvania Computer and Information Science Educators, California, PA.
- Bennett, D., & Tucker, D. (2012). *Pilot Study in Computer Literacy of Word Processing for Incoming College Students*. Paper presented at the Pennsylvania Computer and Information Science Educators Millersville, PA.
- Tucker, D. (2011). Exploring Game-Based Learning for Computer Science. *Laurel Highlands Communications Conference*. Indiana, PA.
- Schaeffer, C. E., Tucker, D., Tourtellotte, S., Gomboc-Turyan, J., King, M., & Mocek, L. (2010). The Impact of Social Media on Communications Media Research. Presentation at the *Laurel Highlands Communications Conference*. Indiana, PA.
- Sherman, C., Schaeffer, C. E., Tucker, D., & Wiggins, B. E. (2010). Utilizing Games and Simulations to Support Learning. Presentation at *The Pennsylvania Education Technology Expo and Conference*. Hershey, PA.
- Tucker, D. (2006). *Noise removal in ultrasound images*. Paper presented at the 1st Annual Kent State Department of Computer Science Poster Conference. Kent OH.
- Tucker, D. (2006). *Topics in data mining*. Presented at the Faculty Research Initiative, Edinboro, PA.
- Tucker, D. (2005). *A method of implementing concurrent distributed programming projects in the classroom*. Presented at the Faculty Research Initiative, Edinboro, PA.
- Tucker, D. (2003). *Implementing a human computer interaction course in CS curriculum*. Paper presented at the Pennsylvania Association of Computer and Information Science Educators, Shippensburg, PA.
- Tucker, D. (1999). *Applying domain knowledge to knowledge discovery systems*. American University, Washington DC.
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Grants

LECOM Research for developing a game app, \$10,000. Student & faculty development of *Medial Munch*, a game designed for medical students taking anatomy at Lake Erie College of Medicine (LECOM), Erie PA (2016)

**Consultation
& Review
Work**

Faculty reviewer for Web Programming and Internet Technologies, Lingras & Scobey (2012)
Occupation Specialist for Accrediting Commission of Career Schools and Colleges (ACCSC) accreditation body for Erie Institute of Technology (2012)

Community Presentations & Workshops	<p><i>Hacking 101</i> – PI Day Celebration, Edinboro University, Edinboro PA (2017,18,19)</p> <p><i>Be Internet Awesome</i> – Internet awareness presentation for parents and their children for the James W. Parker Middle School PTA, sponsored by GOOGLE. General McLane Middle School, Edinboro, PA (2018)</p> <p><i>Bits of Sound</i> – PI Day Celebration, Edinboro University, Edinboro PA (2016)</p> <p><i>Color by Numbers</i> - STEM Day, Edinboro University, Edinboro PA (2015 & 2016)</p> <p><i>Computer Related Careers</i> - Fairview Career Day, Fairview High School, Fairview PA (2014) & (EUP 2016)</p> <p><i>What is a Computer Scientist?</i> - Crawford County K-12 Career and Education Alliance STEM Camp, Edinboro University (2015)</p> <p><i>Careers in Math & Computer Science</i> – Career Day, Edinboro University, Edinboro PA (2013)</p> <p>NWPA Industry Club Expo – Take part in hands-on STEM related activity for middle and high school students, 2013</p>
Professional Organizations	<ul style="list-style-type: none"> • Association of Computing Machinery Member • Special Interest Group – Computer Science Education of the ACM • Pennsylvania Association of Computer and Information Science Educators (PACISE) • Upsilon Pi Epsilon, Computer Science Honor Society, faculty advisor • Phi Kappa Phi Honor Society, Indiana University of Pennsylvania Chapter, member.
Academic Service	<ul style="list-style-type: none"> • Computer Science Assistant Chair at Edinboro – July 1, 2022 • Chair, Computer Science Curriculum Committee (2015 – 2019) • Math & CS department hiring committee (2015 – 2018) • Computer Science Curriculum Committee (2001 – Present) • APSCUF, Faculty Union, Treasurer (2015 – Present) • APSCUF, Faculty Union, Executive Council member and Delegate (2013-2017, 2021-present) • STEM & PI Day committee Member (2015 – Present) • Departmental Planning Committee (2011 – Present) • Departmental Systems Administration Committee (2009 – Present) • Department Technology & Communication Liaison (2010 – Present) • Department Web Master (2006- 2014) • Department Grade Appeal Committee Chair (2011 – Present) • Member of the Latin American Studies Committee (2004 – Present) • Upsilon Pi Epsilon – Advisor for the Computer Science Honor Society • Lambda Chi Alpha, Faculty Advisor (2001 – 2004) & (2007 – Present) • Alpha Kappa Lambda, Faculty Advisor (2005 – 2010) • Member of University Senate Student Concerns Committee (2011, 2012) • Department Faculty Evaluation Committee (2008 – 2010) • Member of Information Technology Curriculum Committee (2001 – 2008) • Served on Numerous Masters of Information Technology thesis committees (2004-2011) • Chairperson for the University Senate Planning and Assessment Committee (2004,05) • Member of the 21st Century Planning Committee; Uniting for Success subcommittee (2004,05)
Community Service	<ul style="list-style-type: none"> • Lambda Chi Alpha; Beta Delta Chapter – Hold the office of High Pi (Alumni advisor) 2007 - Present • James W. Parker Middle School PTA – Treasurer and general membership volunteer, 2018 – 2020 • EUP College Bowl – Member of the officiating team, 2016 - Present • Potterfest - Volunteer to create and maintain the website, potterfest.com, for the conference and week-long activities relating to the Harry Potter, 2011 – 2019 • McLane Church – Volunteer in the church band, 2013 – Present • International Studies Fund Raiser, Committee member – Provided PA system for fundraiser, 2014 - Present • Cody's Wheels of Hope – Volunteer band member at Big Bash for Bikes 2014 • Montessori in the Woods school for children - Member of the Board of Directors as an IT consultant, 2013 - 2014 • Edinboro Women's Services – Volunteer to edit and maintain their website. • National History Day Judge – 2009 & 2010; Pennsylvania Regional Held at Edinboro University • Global Excellence Conference – Created the website for this conference which was hosted at Edinboro. University (2008). • Latin American Studies Conference – Created the website for this conference which took place at Edinboro University (2004) • Girl Scout Troop 004, Edinboro PA – Assist with the cookie sale fund raiser, and hosted the troop at the CS department's computer labs which provided a means for members to earn Try-It badges such as <i>Computer Smarts</i> and <i>Point Click and Go</i>.

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- St. Paul's Lutheran Church, Cambridge Springs PA – Created and posted the initial web site for the church. Followed by weekly maintenance.