OHIO SENATE
2022 DEC -8 PM 3:06

STATE OF OHIO

Executive Department

OFFICE OF THE GOVERNOR

Columbus

I, Mike DeWine, Governor of the State of Ohio, do hereby appoint Paul William Yost, from Portsmouth, Scioto County, Ohio, as a Member of the Third Frontier Commission for a term beginning January 1, 2023 and ending at the close of business April 1, 2024, replacing David R. Scholl, whose term expired.

IN WITNESS WHEREOF, I have hereunto subscribed my name and caused the Great Seal of the State of Ohio to be affixed, at Columbus, this 7th day of December in the year of our Lord, Two Thousand and Twenty Two.

Mike DeWine
Governor

Paul W. Yost
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(740) 285-6759
Paul.W.Yost@gmail.com

Curriculum Vitae

Education

M.S. – Computer Science – University of Cincinnati – 1995
University Graduate Fellowship; Graduate Teaching Assistantship; Dean's List

B.S. – Computer Engineering Technology – Shawnee State University – 1992
Aristech Scholarship; Presidential Honor Award Scholarship; Magna Cum Laude

Current Employment

Shawnee State University: Associate Professor, Simulation and Gaming Engineering Technology. Full-time tenured faculty in the Simulation and Gaming Engineering Technology and Computer Engineering Technology programs within the Department of Industrial and Engineering Technology. Originator of the Digital Simulation and Gaming Engineering 4 year degree, which has been nationally ranked in the top 20 for the past 7 years. 2015 – Present.

Courses Taught:

ETGG 1801	Game Programming Foundations I
ETGG 1802	Game Programming Foundations II
ETEC 2110	Systems Programming
ETEC 3201	Networking and Communication
ETEC 3402	Automata and Formal Languages
ETEC 3702	Concurrency
ETEC 4401	Compiler Design and Implementation
ETEC 4301	Design Lab I
ETEM 2520	EM Design/ Presentation

Yost Labs, Inc.: Chief Technical Officer / Founder. Founder and CTO of a company specializing in research & development, hardware, and software solutions for industry. The company's roots go all the way back to 1998, but it has existed under different names over the years. In recent years, research and development has focused upon inertial sensor systems, virtual reality systems, augmented reality, motion-capture systems, and related technologies. Leader of all research & development activities, manager of technical development team, and relevant executive management duties. Numerous patents awarded and pending.

Current development activities include: R&D for a DoD contract related to a novel application of machine learning related to using inertial sensing solutions for pedestrian-based navigation in GPS-denied environments, product development for an application-specific long-range wireless sensor for use in multiple tracking applications, next-generation miniature inertial sensor solutions, and the development of IP related to automatic sensor calibration. 2014 - Present.

Software Conversion and Interfacing for Chronocom, under Versyx contract, Quebec, Canada. Migrated point-of-sale software from QBASIC to C, and implemented interface modules for proprietary hardware. 1994-1995.

Embedded Mobile Data Acquisition System Design for Veech Trucking, Lucasville, OH. Initial system design for mobile GPS tracking system for tax apportionment. 1993.

Custom Software Development for Association of Computational Machinery, Portsmouth, OH. Designed software to allow remote viewing of the Annual ACM Collegiate Programming Contest. Allowed, for the first time in ACM history, direct real-time involvement of spectators during the programming contest. 1992.

Prior University Teaching Experience

Shawnee State University: Assistant Professor, Computer Engineering Technology. Full time teaching duties for the Computer Engineering Technology program within the Department of Industrial and Engineering Technology. 1995 – 2008

Courses Taught:

ETCO 115	Computer Programming for Technology
ETEC 199	Special Topics: Network Management
ETEC 250	Computer System Integration
ETEC 280	Applications Programming with C
ETEC 299	Special Topics: Undergraduate Research Experience
ETEC 315	Computer Architecture
ETEC 316	Automata & Formal Languages
ETEC 351	Networking and Communications I
ETEC 352	Networking and Communications II
ETEC 371	Operating Systems I
ETEC 372	Operating Systems II
ETEC 373	Advanced Operating Systems with UNIX
ETEC 399	Special Topics: Undergraduate Research Experience
ETEC 477	Concurrency
ETEC 480	Compiler Design and Implementation
ETEC 491	Senior Design Laboratory I
ETEC 492	Senior Design Laboratory II
ETEC 495	Special Topics: Graphical User Interface Design
ETEC 495	Special Topics: Advanced Programming Topics & Code Optimization
ETGG 101	Game Programming Foundations I
ETGG 102	Game Programming Foundations II
ETGG 103	Game Programming Foundations III

University of Cincinnati: Graduate Teaching Assistant. I taught various courses in Engineering and Computer Science. Responsible for class content development as well as teaching multiple courses. UNIX system management and maintenance. 1993-1995.

Computer Engineering Technology Curriculum Development:

I was responsible for many of the proposed major updates to the existing Computer Engineering Technology BS degree program, both in 2001 when the program needed to be updated to be made more current and in 2007 when the program underwent the transition from quarters to semesters. These program changes became necessary as a means of resynchronizing teaching methodologies, focuses, and subject areas with the current depth and breadth of the computer engineering and technology industries. I was responsible for the development of the course content of the following new classes: Computer Engineering Technology, Operating Systems I, Operating Systems II, Advanced Operating Systems, Automata, Algorithm Design and Analysis, Graphical User Interface Design and Human Computer Interaction. These classes demonstrate a shift in focus from the more industrial "training" form of education to a more general critical thinking and applied knowledge-based form of education. This shift enabled students to thrive in the ever-evolving dynamic field of computer engineering technology.

Publications

Yost, Paul W. "Real-time Automatic Calibration of Magnetic Sensors" Patent US10705173 B2. 7 Jul 2020.

Yost, Paul W. and Skaggs, R. Duane. *"Computational models and wearable sensors for real-time assessments of Soldiers' performance in complex tasks"* SBIR Research Proposal – US Army SBIR Solicitation A19-014, 2019.

Yost, Paul W. "Local Perturbation Rejection Using Time Shifting" Patent US10209078 B2. 19 Feb 2019.

Yost, Paul W. and Landers, Stephen P. "Sensor Devices and Methods for Calculating an Orientation While Accounting for Magnetic Interference" Patent US10310129 B2. 4 Jun 2019.

Yost, Paul W. "Performance of Inertial Sensing Systems Using Dynamic Stability Compensation" Patent Application (pending) US20180120112 A1. 3 May 2018.

Yost, Paul W. "Realtime Automatic Calibration of Magnetic Sensors" Patent Application (pending) US20180059205 A1. 1 Mar 2018.

Yost, Paul W. *"Yost Labs QGRAD2 Sensor Fusion Performance Analysis"*. Web and Print Published Whitepaper. Yost Labs, Inc. *2017.*

Yost, Paul W.; Skaggs, R. Duane; Fox, D. "Determining Distance and Position with a Low-Cost Inertial Measurement Unit", Web and print published white-paper. 2 Feb 2017.

Yost, Paul W. and Landers, Stephen P. "Sensor Devices Utilizing Look-Up Tables for Error Correction and Methods Thereof" Patent US9528863 B2. 27 Dec 2016.

Yost, Paul W. "Combining Redundant Inertial Sensors to Create a Virtual Sensor Output" Patent US9354058 B2. 31 May 2016.

Institute of Navigation (expo presenter, break-out session presenter)
Autonomous Vehicle / Unmanned Systems International (main-floor seminar presenter)
Robo Business (expo presenter, Robo-business best-of award winner)
Consumer Electronics Show (expo presenter)
Game Developer Conference (expo presenter)
South by Southwest (expo presenter)
Sensors Expo (expo presenter)
Autonomous Vehicle / Unmanned Systems International (expo presenter)
Embedded Systems Conference
JavaOne
Association of Computational Machinery

University Committee Assignments

2018-Present: Digital Simulation and Gaming Assessment Working Group

2017-2018: Digital Simulation and Gaming Faculty Search Committee

2000-2007: Faculty Development Committee
University Technology Advisory Committee
Critical Thinking Task Force on Assessment
ETEC Curriculum Development & Enhancement Committee
ETGG Curriculum Development & Enhancement Committee
CS Degree Development Investigative Working Group
Semester Conversion Committee

1999-2000: University Technology Advisory Committee
Math Faculty Search Committee
Math Education Search Committee

1998-1999: University Technology Advisory Committee

1997-1998: University Technology Advisory Committee
ETCO 110/115 Course Assessment Committee (Chair)

University Service and Awards

2022: Shawnee State University - Alumni Continued Service Award

2019(Fall): Programmer of TANKS House Challenge for Digital Simulation & Gaming Students

2019(15 Oct): Gaming Technology Presentation for Ohio Education Chancellor Randy Gardner

2019(12 Feb): VR Technology Demonstration for Ohio Governor Mike DeWine

2018(18 Jan): President's Club Evening Speaker

2017-Present: SSU Kricker Innovation Hub Advisory Board

1998-2007: CET iButton Access Program for Design Lab

Special Education Programs for High School Students

2012-2016: Boy Scout Robotics Merit Badge Class

2004-2005: Governor's Summer Honors Institute for Gifted Students: Game Programming

2003-2004: Governor's Summer Honors Institute for Gifted Students: Game Programming

2000-2001: Governor's Summer Honors Institute for Gifted Students: Rise of the Robots
Upward Bound Summer Program: Walking Robots

1999-2000: Governor's Summer Honors Institute for Gifted Students: Rise of the Robots
Upward Bound Summer Program: Cryptology & Steganography

1997-1998: Tech Prep's Career Exploration for Women: Computer Engineering

1993-1994: Martin Marietta Math & Science Academy: Embedded Systems

1992-1993: Martin Marietta Math & Science Academy: Computer Interfacing

1991-1992: Martin Marietta Math & Science Academy: Computer Interfacing

Community & Other Activities

Development:

Board Member, Southern Ohio Museum and Cultural Center (2012-Present)
Board Member, Advisory board for the Kricker Innovation Center (2017-Present)
Board Member / Chair, City of Portsmouth Historic Design and Review Board (2014-Present)
Board Member, Morehead State University Math and Physics Academic Advisory Board (2016-2018)
Portsmouth Chamber of Commerce
Atlas Group Co-founder (Small Business Start-up Support)
Southern Ohio Technology Alliance
Information Technology Alliance of Appalachian Ohio

Other:

SSU Table Tennis Club Faculty Adviser and Event Team Coach
SSU Table Tennis Coach for 3 years
SSU Assistant Table Tennis Coach for 2 years
Organized SSU Hosting of Table Tennis Shoot-Out Tournament with Ohio State University
Transported ACUI Table Tennis Teams to National Tournaments
Nationally Ranked Competitive Table Tennis Player

Research Activities

I'm a firm believer in research activities that are both academic and practical in nature. I like to take innovative ideas and then see them do real things in the real-world. During much of my time at SSU I was a member of the council for undergraduate research and I supported and led students on research

GOVERNOR'S APPOINTMENTS
TO BOARDS AND COMMISSIONS

Appointment Date: 1/1/2023

Name of Appointee: Paul William Yost

Address:
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Scioto County
(H) – 7402856759
(W) – 7408764936
(M) – 7402856759
(E) – Paul.W.Yost@gmail.com

Name of Commission: Third Frontier Commission

Michael McKay

Executive Director, Ohio Third Frontier
77 South High Street, 28th Floor (Reception: 29th Fl)
Columbus
(614) 644-9159

Term Begins: 4/2/2021
Term Ends: 4/1/2024
Party Affiliation: Independent
Senate Confirmation: Appointed by the Governor, confirmed by the Senate
Financial Disclosure: Public disclosure required
Vice: David R. Scholl