RESOLUTION NO. 3107

BE IT RESOLVED, by the City of Salisbury, Maryland that the following individual is re-appointed to the Parks and Recreation Committee, for the term ending as indicated.

Name	Term Ending
Joseph Anderson	July 2024

THE ABOVE RESOLUTION was introduced and duly passed at a meeting of the Council of the City of Salisbury, Maryland held on May 24, 2021.

ATTEST:

Kimberly R. Nichols
CITY CLERK

John R. Heath
PRESIDENT, City Council

APPROVED BY ME THIS

11th day of June, 2021

Jacob R. Day
MAYOR, City of Salisbury

City of Salisbury
Jacob R. Day, Mayor

MEMORANDUM

To: Julia Glanz, City Administrator

From: Julie English, Administrative Assistant III

Subject: Re-appointment to the Parks and Recreation Committee

Date: May 24, 2021

The following person would like to be re-appointed to the Parks & Recreation Committee for the term ending as indicated.

Name	Term Ending
Joseph Anderson	July 2024

Attached you will find information from Joseph Anderson and the Resolution necessary for his re-appointment. If approved, I will forward this information to the City Council so it may be placed on their agenda at the next Council meeting. Please let me know if you have any questions.

Attachments

cc: Mayor Day

Salisbury University

Computer Science
Applied Mathematics
Statistics
Pure Mathematics

RICHARD A. HENSON SCHOOL OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
1101 Camden Avenue
Salisbury, Maryland 21801-6860
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1-888-543-0148
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FAX 410-548-5559
faculty.salisbury.edu/~mathcosc/

Mayor Jacob Day
Mayor's Office
125 N. Division Street, Room 304
City of Salisbury, MD

April 30, 2021

Dear Mayor Day,

I am writing to put my name forward as a candidate to continue service as part of the the City of Salisbury Parks and Recreation Committee. This would be my second term on the committee, during which I believe we have made good recommendations to your office, which have been partially implemented and resulted in a more accessible, sustainable, and positive parks infrastructure for the area. I have served as vice-chairperson of this committee and would appreciate the opportunity to continue doing so, at your pleasure.

Although my formal education is not directly related to Parks and Recreation, or local government, I am capable of helping to research aspects of different projects to find and orchestrate practical solutions. As a scientist, I am willing to contribute to greater debate about the various aspects of the community recreation system, and to aid in community outreach and awareness with presentations, meetings, and workshops.

Finally, I love working as part of a team to help my community grow and be enjoyed by all. I'm passionate about educating people when I can teach, and sharing in their education when I can learn. I hope that with my interests and background I can help you and my fellow community members improve the city that we are all proud to call home.

Sincerely,
Joseph Anderson, Ph. D.
Assistant Professor
Department of Mathematics & Computer Science
Salisbury University

Joseph Anderson

Salisbury University
140 Devilbiss Hall
1101 Camden Ave
Salisbury, MD
21804

Email: jtanderson@salisbury.edu
Homepage: http://faculty.salisbury.edu/~jtanderson

Personal

Full name: Joseph Timothy Anderson

Born: 23 February 1990

Citizenship: I am a United States Citizen

Education

Ph.D., Computer Science and Engineering — May 2017

The Ohio State University
Thesis: *Geometric Methods for Robust Data Analysis in High Dimension*
Thesis Advisor: Dr. Luis Rademacher (UC, Davis)
Academic Avisor: Anastasios Sidiropoulos

M.S. Computer Science and Engineering — December 2015

The Ohio State University
Thesis: *Geometric Methods for Robust Data Analysis in High Dimension*
Advisor: Dr. Luis Rademacher

B.S. Mathematics, Saint Vincent College — May 2012

B.S. Computing & Information Science, Saint Vincent College — May 2012

Research Interests

Theoretical computer science, machine learning, convex geometry, data science, statistics, optimization, probability theory.

Experience

Salisbury University — 2017–Current

Assistant Professor of Computer Science

The Ohio State University — 2012–2017

Instructor: "Foundations I: Discrete Structures"

Graduate Research Assistant

Teaching Assistant

Research Fellow

Saint Vincent College 2008–2012

Computing & Information Science Department Server Administrator

Computing & Information Science Department Tutor

Information Services Desktop Analyst

University of New Orleans Summer 2011

Undergraduate Research Fellow

Ethix Systems, LLC 2010 - 2011

Programming Intern

Publications

Peer-Reviewed Conference Proceedings

J. Anderson, L. Rademacher "Efficiency of the floating body as a robust measure of dispersion", ACM-SIAM Symposium on Discrete Algorithms, 2020.

J. Anderson, N. Goyal, A. Nandi, L. Rademacher "Heavy-Tailed Analogues of the Covariance Matrix for ICA", *Association for the Advancement of Artificial Intelligence*, 2017

J. Anderson, N. Goyal, A. Nandi, L. Rademacher "Heavy-Tailed Independent Component Analysis", *Foundations of Computer Science*, 2015

J. Anderson, M. Belkin, N. Goyal, L. Rademacher, J. Voss "The more, the merrier: the blessing of dimensionality for learning large Gaussian mixtures", *Conference on Learning Theory*, 2014

J. Anderson, N. Goyal, L. Rademacher "Efficient Leaning of Simplices", *Conference on Learning Theory*, 2013

J. Anderson, M. Gundam, A. Joginipelly, D. Charalampidis "FPGA Implementation of Graph Cut Based Image Thresholding" *IEEE Southeastern Symposium on System Theory*, 2012

Presentations

J. Anderson, "Robust Signal Processing with the Convex Floating Body", Joint American Mathematical Society and Mathematical Association of America National Meetings. Baltimore, MD. 2019

J. Anderson, "Convex Geometry in Algorithms for Heavy-Tailed Statistics", Mathematics Association of America MD/DC/VA Section Meeting. Lexington, VA. Spring 2018

Other

J. Anderson, J. Austin, Y. Jing, L. Schneider, R. Shifler, and S. Wesolowski. (2018). "Faculty Writing Groups for Mathematicians" . MAA Focus, 38 (5).

Supervised Research

Thaigota, Sai. "Filtering Multivariate Data Through Convex Floating Bodies". REU, Summer 2019.

Arausa, Christopher. "A Study on Parallel Machine Learning, Supervised Learning, and Reinforcement Learning". REU, Summer 2019.

Bones, Lela. "Interpreting EEG Signals with OpenBCI Hardware". National Conference of Undergraduate Research. 2019.

Kane, Cameron. "Developing New Accessibility Features Using Deep Learning and Data Generation". National Conference of Undergraduate Research. 2019.

Lipiec, Andre. "Using Perlin Noise for Random Walk". Salisbury University Student Research Conference. 2019.

Barnes, Samuel. "Software For Mapping Social Identities". Salisbury University Student Research Conference. 2019.

Nigro, Vincent and Borden, James. "Financial Analytic Distribution: Quantifying Market Sentiment". Salisbury University Student Undergraduate Research Conference. 2019.

Nguyen, Hieu and Schwartz, Ian. "Developing an AI Framework to Play Games Without Knowing the Rules". REU, Summer 2018.

Ogunmolasuyi, Ayobami. "Parallelization of Machine Learning Algorithms". REU, Summer 2018.

Yousif, Mahmoud and Bones, Lela. "Using Machine Learning to Read Your Mind". Salisbury University Student Research Conference. 2018.

Teaching

Salisbury University

COSC 117 - Fundamentals of Programming	Fa17
COSC 120 - Computer Science I	Fa18
COSC 220 - Computer Science II	Fa17, Sp18, Sp19, Sp20
COSC 320 - Advanced Data Structures and Algorithm Analysis	Sp18, Fa18, Sp19, Sp20
COSC 362 - Theory of Computation	Fa17, Fa18, Sp19
COSC 420 - High-Performance Computing	Fa19
COSC/MATH 490 - Special Topics: Computational Topology	Fa18
COSC 490/MATH 501 - Methods of Teaching Computer Science	Sp20

The Ohio State University

Lecturer, Foundations I: Discrete Structures	Sp16, Au16
Teaching Assistant, Computability and Complexity	Sp14
Teaching Assistant, Foundations II: Data Structures and Algorithms	Au13

Activities and Service

Peer-Review

IEEE Transactions on Pattern Analysis and Machine Intelligence

Elsevier Signal Processing

Foundations of Computer Science (FOCS), 2019

Conference on Learning Theory (COLT), 2019, 2018

Conference of the Association for the Advancement of Artificial Intelligence (AAAI), 2017

NSF Algorithmic Foundations Review Panel

Salisbury University

Chair, Salisbury University Faculty Financial Affairs Committee — Fall 2018-2021

Faculty Member, Upsilon Pi Epsilon International Honor Society for the Computing and Information Disciplines (ACM) — Spring 2018-Present

Instructor, STEM Saturdays — Fall 2018

Senior Personnel, REU Site: Exercise - Explore Emerging Computing in Science and Engineering 2018-2020

Member, Salisbury High School Mathematics Competition Committee — Fall 2018

Member, Henson School of Science STEM Outreach Committee — Fall 2018-Present

Member, City of Salisbury Parks and Recreation Committee — Summer 2018-2021

Member, Henson Scholarship Committee — Spring 2018

Member, Salisbury University Honors Faculty Fellows — Fall 2017

Judge, Joint Mathematics Meetings Undergraduate Poster Session — 2018, 2019

Coordinator, Computer Science Academic Program Review — 2018-2021

Ohio State University and St. Vincent University

Ohio State University Community Orchestra — Fall 2012-2014

President and Founder of Saint Vincent College Computer Science Colloquium Club — Fall 2011-2012

Saint Vincent College Marching Band — Fall 2009-2012

Saint Vincent College Camerata and Gregorian Schola — Fall 2008-2012

Alpha Lambda Delta Honor Society — Spring 2011-2012

Awards

INSPIRE-CS Fellowship

Salisbury Foundation Faculty Research Grant, 2018

Henson Faculty Travel Grant, 2018

Google Travel Grant - Conference on Learning Theory.

Ohio State University Research Fellowship Award.

A. J. Palumbo Student Research Grant, Saint Vincent College. PI: Joseph Anderson, Advisor: Br. David Carlson.

Saint Vincent College Computing & Information Science Academic Excellence Award, for top student in CIS department.

Saint Vincent College Computing & Information Science Scholarship Exam Winner, full tuition awarded.

Eagle Scout Award, BSA

Coursework and Skills

Statistical modeling/Bayesian analysis

Machine learning (kernel methods, PCA, neural networks)

Probability Theory

Randomized Algorithms

Convex geometry

Real Analysis, Topology

Matlab (optimization toolkit, signal processing toolkit, Gurobi plugin)

Mathematica

Python (with numerical analysis packages)

C, Objective-C, C++

MySQL, PostgreSQL, MongoDB

Javascript, PHP

References

Available upon request.