SKYLAR WOLFGANG WURSTER

245 King Ave Unit 301, Columbus OH, 43210 | 1-224-800-8152 | Wurster.18@osu.edu

RESEARCH INTEREST

Computer graphics, machine learning, deep learning, real-time graphics, virtual reality, data visualization

EDUCATION

Ohio State University
PhD student in Computer Science — **In progress**
Areas of focus: Data visualization and machine learning

Ohio State University
Bachelor of Science in Computer Science and Engineering — **2019**
Areas of focus: Computer graphics
Magna Cum Laude

EMPLOYMENT

The Hiatus System, Columbus Ohio
Co-founder, computer engineer — **January 2018 – present**
Developed a mobile VR application utilizing a custom belt to track breath to teach mindfulness-based stress relief tactics.

Ohio State University, Columbus Ohio
Graduate Teaching Assistant – Computer Science and Engineering — **August 2019 – present**

Ohio State University, Columbus Ohio
Research Assistant – Computer Science and Engineering — **May 2019 – August 2019**
Developing machine learning models and visualizations for breast cancer detection augments with radiologist input.

Ohio State University, Columbus Ohio
Research Assistant – Advanced Computing Center for the Arts and Design — **January 2017 – May 2019**
Developed Unity applications concerned with virtual reality, mixed reality, augmented reality for use in the healthcare and veterinary fields.

Ohio State University, Columbus Ohio
Grader – Computer Science and Engineering — **January 2019 – May 2019**
Graded student's projects and reviewed curriculum for CSE 5912, a capstone game development course.

United Airlines, Chicago Illinois
Contact Center IT Intern – Computer Science and Engineering — **January 2019 – May 2019**
Developed machine learning models for predicting why a customer would be calling and for pulling information from handwritten baggage claim reports.

Discovery Lab Global, Dayton Ohio
Research Intern and Peer Advisor — **August 2016 – January 2017**
Designed 3-week classes to be taught to interns in Discovery Lab Global each year.
Created tools for an NSA funded project to teach cybersecurity to veterans and active duty servicepeople.

Air Force Research Laboratory's Discovery Lab, Dayton Ohio
Research Intern and Liaison — **July 2015 – December 2015**
Team lead of 13 to create a virtual replication of Air Force One with an AI guided tour.
Created a web application for search and rescue missions.

AWARDS

First place at a Microsoft coding contest at OSU — September 27, 2017
Humane Technologies Fellow — August 2017 – May 2018

National Buckeye Scholarship August 2015 – May 2019
Provost Scholarship August 2015 – May 2019

TEACHING EXPERIENCE

Dundee Crown High School
Tutor – Advancement Via Individual Determination (AVID) **August 2014 – May 2015**
Tutored students in grades 9th – 12th on classes focused on math, such as geometry, algebra, pre-calculus, calculus, and physics.

The Ohio State University
Graduate Teaching Assistant **August 2019 – May 2020**
Training for and teaching CSE 2221: Software 1, an introduction to software engineering.

RESEARCH

The Ohio State University
Undergraduate researcher **January 2016 – December 2016**
Researched maze generation algorithms with user constraints inside of Unity.

PUBLICATIONS, PRESENTATIONS, AND PAPERS

Bruggeman, K. & Wurster, S. W. 2018. The Hiatus System: virtual healing spaces: low dose mindfulness based stressed reduction virtual reality application. SIGGRAPH '18 ACM SIGGRAPH 2018 Appy Hour. 8.
Wurster, S. W. 2016 Generating and Creating Perfect-Mazes in Unity. Denman Undergraduate Research Forum.
Paul Hyunjin Kim, Jacob Grove, Skylar Wurster, and Roger Crawfis. 2019. Design-centric maze generation. In Proceedings of the 14th International Conference on the Foundations of Digital Games (FDG '19). ACM, New York, NY, USA, Article 83, 9 pages.
doi: doi.org/10.1145/3337722.3341854
VIS2019 - Presented on behalf of Junpeng Wang: *J. Wang, S. Hazarika, C. Li and H. Shen, "Visualization and Visual Analysis of Ensemble Data: A Survey," in IEEE Transactions on Visualization and Computer Graphics, vol. 25, no. 9, pp. 2853-2872, 1 Sept. 2019.*
doi: 10.1109/TVCG.2018.2853721
VIS 2019 - Presented on behalf of Ko-Chih Wang: *K. Wang, T. Wei, N. Shareef and H. Shen, "Ray-based Exploration of Large Time-varying Volume Data Using Per-ray Proxy Distributions," in IEEE Transactions on Visualization and Computer Graphics.*
doi: 10.1109/TVCG.2019.2920130

GRANT FUNDING

Chronic Brain Injury Pilot Award via Discovery Themes at Ohio State University
OSU Research Grant - $50,000

SIGGRAPH Travel Grants
Multiple OSU travel grants for SIGGRAPH 2018 and 2019 - $6000