Tanner Hoelzel

EDUCATION

Binghamton University, State University of New York December 2019

Bachelor of Science in Computer Science, Watson School of Engineering
Bachelor of Arts in Mathematical Sciences, Harpur College of Arts and Sciences
GPA: 3.21/4.00

EXPERIENCE

Zen Mountain Monastery, Mt. Tremper NY Jan 2020 - Apr 2020

Resident and Student

- Assisted head cooks in a busy kitchen serving up to 100 residents and guests per day
- Served formal meals to monastic and lay students during weeklong meditation intensives
- Welcomed visitors and retreat participants on tours of monastery buildings and grounds

Siege Technologies, Rome NY May 2018 - Aug 2018

Kernel Team

- Developed tool for complete reverse engineering of linux kernel security feature
- Adapted state-of-the-art hardware attacks to new SoCs based on new proofs-of-concept
- Augmented in-house tools alongside team and integrated changes to collaborative git repo

Residential Life, Binghamton University Aug 2016 - Jan 2018

Resident Assistant

- Led outings to tech hubs including Cornell's CESR and a local hackerspace
- Organized interactive demo booth at local STEM fair for young women interested in tech
- Hosted exam tutoring sessions for residents in linear algebra and calculus

Computer Graphics Group, Technical University of Cologne May 2017 - Aug 2017

Researcher

- Implemented Kalman filter in C# to smooth motion capture data for real-time animation
- Designed various position- and orientation-estimation models in Unity 3D
- Optimized algorithm performance in real-time VR environment

Graphics and Image Computing Laboratory, Binghamton University Sep 2015 - Feb 2017

Researcher

- Published state-of-the-art sign language recognition results at ICIP 2017
- Optimized an open-source C++ random regression forest for gesture classification
- Developed novel features with WEKA to achieve high classification accuracy

INTERESTS

- Road bicycling and hiking, especially multi-day long-distance trips
- Skate skiing and, one day, skijoring!