

Christian Kauten

Graduate Research Assistant at Auburn University
<https://kautenja.github.io>

April 7, 2020

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Education

Ph.D. Software Engineering

Auburn University

Auburn, AL

2017 – 2020

M.S. Software Engineering

Auburn University

Auburn, AL

2017 – 2019

B.S. Software Engineering

Auburn University

Auburn, AL

2013 – 2017

Research Experience

Research Assistant

Auburn University

Auburn, AL

2017 – 2020

Publications

1. Christian Kauten, Ashish Gupta, Xiao Qin, Han Li, and David Bevly. A perception augmentation system for autonomous vehicles. In *Pre-ICIS SIGDSA Symposium on Decision Analytics Connecting People, Data, and Things*, San Francisco, CA, USA, December 2018.
2. Xiaopu Peng, Christian Kauten, Chaowei Zhang, Thomas Heckwolf, Jianzhou Mao, Taha Tekreeti, and Xiao Qin. REDUX: Managing renewable energy in data centers using distributed UPS systems. In *IEEE SmartCloud*, New York, USA, September 2018.
3. Chaowei Zhang, Ashish Gupta, Christian Kauten, Amit V. Deokar, and Xiao Qin. Detecting fake news for reducing misinformation risks using analytics approaches. *European Journal of Operational Research*, 2019.

Presentations

A Perception Augmentation System for Autonomous Vehicles

- 2018 Pre-ICIS SIGDSA Symposium
Prototype Demonstration

San Francisco, CA
December, 2018

- 2019 Auburn University Student Symposium
Poster Session

Auburn, AL
April, 2019

Awards, Grants & Honors

Woltosz Graduate Fellowship 2017 – 2020
Holy Innocents' Computer Science Award 2013
Eagle Scout Award 2011

Selected Open Source Projects <https://github.com/Kautenja>

Super Mario Bros. for Open AI Gym

A framework for training reinforcement learning agents to play Super Mario Bros.

Python

2018

NESpy Emulation System

A python interface for developing NES-based reinforcement learning environments.

C++, Python

2018

Skills

Numerical Analysis and Computer Science Computational Science, Algorithm Design & Analysis, Artificial Intelligence, Machine Learning, Parallel Programming, Distributed Systems, Data Structures

Software Engineering Test & Behavior Driven Development, Software Modeling, Debugging, Profiling, Code Optimization, Computer Architecture, Documentation, Source Control, Software Process

Programming Environments Python, C++, Swift, \LaTeX , HTML, CSS, JavaScript

Technologies Keras, TensorFlow, CoreML, SciKit Learn, NumPy

Development Platforms Debian, RedHat, CentOS, iOS, MacOS, Android