

Mark Nemecek

✉ markn@cs.duke.edu | 🏠 mark-nemecek.github.io

Education

Duke University

PHD COMPUTER SCIENCE

- Advisor: Ronald Parr
- Dissertation: Transfer Learning in Value-based Methods with Successor Features

Durham, NC

September 2023

Duke University

MS COMPUTER SCIENCE

- Advisor: Ronald Parr
- Thesis: Transition Space Distance Learning

Durham, NC

May 2019

Florida Atlantic University

BS COMPUTER SCIENCE

Boca Raton, FL

December 2011

Publications

REFEREED PAPERS

Nemecek, M; Parr, R. 2021. Policy Caches with Successor Features. International Conference on Machine Learning (ICML).

UNDER REVIEW

Tasse, G N; Love, T; **Nemecek, M**; James, S; Rosman, B. ROSARL: Reward-Only Safe Reinforcement Learning.

OTHER PAPERS

Nemecek, M. 2019. Transition Space Distance Learning. Master's thesis, Duke University.

IN PREPARATION

Nemecek, M; Parr, R. Hierarchical Learning with Successor Features.

Nemecek, M; Jin, W; Parr, R. Value-based Transfer with Continuous Actions.

Professional Experience

2017 - 2023 **Research Assistant**, Duke Computer Science

2016 - 2017 **Graduate Teaching Assistant**, Duke Computer Science

2015 - 2016 **Research Assistant**, Duke Computer Science

2012 - 2015 **Software Developer**, Farragut Systems, Inc.

2007 - 2010 **System Administrator**, Alliant Techsystems, Inc. (Now part of Northrop Grumman)

Awards

2020 **Outstanding Departmental Service Award**, Duke Computer Science

Presentations

INVITED TALKS

October 2022. *Improving Transfer Learning with Successor Features*. Invited talk at the Intelligent Robot Lab at Brown University, Providence, RI.

CONTRIBUTED PRESENTATIONS

Nemecek, M; Parr, R. 2021. Policy Caches with Successor Features. Short Talk/Poster: International Conference on Machine Learning (ICML), Virtual.

Nemecek, M. 2018. Transition Space Distance Learning. DRIV seminar: Duke Computer Science, Durham, NC.

Teaching Experience

Spring 2017 **CS 270: Intro to AI (Undergraduate)**, Graduate Teaching Assistant

Fall 2016 **CS 570: Artificial Intelligence (Graduate)**, Graduate Teaching Assistant

Mentoring

DUKE CS FIRST-YEAR STUDENT MENTORSHIP PROGRAM

2021 - 2022 **Raghuveer Thirukovalluru**, PhD Student

2020 - 2021 **Shujun Qi**, PhD Student

2017 - 2018 **Alina Barnett**, PhD Student

Service

SERVICE

2023 **Duke CS PhD Recruitment**, Graduate Committee Member

2019 - 2020 **Duke CS**, Graduate Liaison to Faculty

2017 - 2020 **Duke CS PhD Recruitment**, Graduate Committee Chair

2017 - 2018 **Duke CS Faculty Search**, Graduate Committee Chair

2016 **Duke CS Faculty Search**, Graduate Committee Member

2016 **Duke CS PhD Recruitment**, Graduate Committee Member

PEER REVIEW

2022 - 2023 **NeurIPS**, Reviewer