David Radke, PhD

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TECHNICAL SKILLS & KEY WORDS

Key Words: Multiagent Systems, Reinforcement Learning, Artificial Intelligence
Skills: Python, C++, Java, SQL, Tensorflow, PyTorch, NumPy, Pandas, ArcGIS

EDUCATION

University of Waterloo
PhD Candidate in Computer Science – Average: 94.6% *August 2018 – June 2023*
- Focus: Artificial Intelligence (AI), Multiagent Systems (MAS), and Hockey Analytics
- USports Ice Hockey Player (Assistant Captain)

Colorado College
Bachelor's Degree in Computer Science, *August 2015 – May 2018*
Minor: Discrete Math – GPA: 3.55
- Thesis: Using Artificial Neural Networks to Predict Wildfire Growth
- NCAA Division 1 Ice Hockey Player

EXPERIENCE

Chicago Blackhawks Chicago, Illinois, USA
Sr. Research Scientist *June 2023 – Current*
Advisor, AI and Hockey Research (part-time) *September 2022 – June 2023*
- Oversee the research and development of analytics models

University of Waterloo **Waterloo, Ontario, Canada**
Research and Teaching Assistant *August 2018 – Current*
- Spearhead research and develop implementations of AI systems

SonyAI America **North America Remote**
Research Scientist Intern *September 2022 – December 2022*
- Intern with the Game AI team developing GT Sophy

Lawrence Livermore National Laboratory **Livermore, California**
Research Intern - Computation *Summer 2018*
- Ray-tracing and tree optimization in large distributed systems

The Center for Catastrophic Risk Management, UC Berkeley **Berkeley, California**
Undergraduate Research Assistant *May 2017 – May 2018*
- Coded on a project about the effects of wildfire on fuel infrastructure

AWARDS & ACKNOWLEDGMENTS

NSERC PGS-D 2022, 2023
Ontario Graduate Scholarship 2022, 2023
President's Graduate Scholarship 2022, 2023

1st Place Sportsnet Hockey Hackathon| Cheriton Scholarship 2020
Waterloo.AI Scholarship 2020

SELECTED PUBLICATIONS

Towards a Better Understanding of Learning with Multiagent Teams *IJCAI '23*

The Importance of Credo in Multiagent Learning *AAMAS '23*

Presenting Multiagent Challenges in Team Sports Analytics *AAMAS '23*

Exploring the Benefits of Teams in Multiagent Learning *IJCAI '22*

Identifying Completed Pass Types and Improving Passing Lane Models *LINHAC '22*

(Best Paper Award)