David T. Radke

51 Crestview Dr, Orinda, CA | dtradke@uwaterloo.ca | +1 (925) 708 9516

TECHNICAL SKILLS & KEY WORDS

Proficient: Python, Java, NumPy, Pandas, Tensorflow, Keras, Artificial Intelligence, Machine Learning, Deep Learning, Systems and Networking, IoT, Linux, MacOS; **Familiar:** C, C++, PyTorch, GIS, ArcGIS

EDUCATION

University of Waterloo   **Ontario, Canada**
PhD Candidate in Computer Science – Average: 94.6%   *August 2018 – Current*
  ❖ Focus: Artificial Intelligence and Systems and Networking
  ❖ USports Ice Hockey Player

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

EXPERIENCE

University of Waterloo, Waterloo   **Ontario, Canada**
Research and Teaching Assistant   *August 2018 – Current*
  ❖ Spearhead and contribute to multiple research projects; prototype implementations in the AI and systems and networking communities
  ❖ Coordinate TAs and grade assignments and exams for undergraduate courses

Lawrence Livermore National Laboratory   **Livermore, CA**
Research Intern - Computation   *Summer 2018*
  ❖ Ray-tracing and tree optimization in large distributed systems
  ❖ Developed the world's largest 3D boid simulation

The Center for Catastrophic Risk Management, UC Berkeley   **Berkeley, CA**
Research Assistant   *May 2017 – May 2018*
  ❖ Main computer scientist on a research project about the expected effects of wildfire on the infrastructure of California's Transportation Fuel Sector
  ❖ Developed code to collect and process remotely sensed satellite imagery in Google Earth Engine

---

AWARDS & AKNOWLEDGMENTS

1st Place Sportsnet Hockey Hackathon: Powered by Rogers 5G	*2020*
Cheriton Scholarship | Math Domestic Graduate Award | Ron & Lynda Glover Award	*2020 - 2022*
Math Domestic Graduate | Cherrey Bus Lines Award | HockeyTech Award	*2018 & 2019*
Colorado College Thesis selected as a "Top Undergraduate Research Project" by Posters on the Hill	*2018*
National Collegiate Hockey Conference All-Academic Team	*2016 & 2017*

RECENT PUBLICATIONS

Beyond Measurement: Estimating Vegetation Height … with Deep Learning	*RemoteSensing '20*
Can Future Wireless Networks Detect Fires?	*BuildSys '20*
FireCast: Leveraging Deep Learning to Predict Wildfire Spread	*IJCAI '19*