

School of Electrical Engineering and Computer Science  
Washington State University  
Pullman, WA, USA

 Personal Webpage  
 [yassine.chemingui@wsu.edu](mailto:yassine.chemingui@wsu.edu)

## RESEARCH SUMMARY

My work focuses on **offline decision-making**: learning to optimize and act safely from logged data when new experiments are costly. I build methods that turn static datasets into effective **optimization models** and **control policies**, motivated by the need for robust and safe AI in domains like materials discovery, healthcare, and smart grids.

- **Offline Safe Reinforcement Learning:** Ensuring safety constraints, optimizing robust policies from limited data, and enabling risk-aware decision-making. For fixed budgets, we used a minimax formulation with bandit-style updates; and for variable test-time constraints, we designed adaptive policies that switch at deployment without retraining.
- **Offline Model-Based Optimization:** Developing surrogate models and efficient search strategies for high-dimensional design problems. This includes recasting offline optimization as an RL problem to guide the search, and designing search-bias-guided surrogates that better align the model's ranking with the optimization goal.

## EDUCATION

**Ph.D., Computer Science** 2022 – Present  
Washington State University  
Advisor: [Prof. Jana Doppa](#)  
*Pullman, WA, USA*

**Thesis:** *Advances in Offline Decision-Making: Black-box Optimization, Safe Reinforcement Learning, and Policy Comparison from Logged Data.*

**Polytechnician Engineer Degree**  (Graduated with Excellence) 2015 – 2018  
Tunisia Polytechnic School  
*Tunis, Tunisia*  
**Major:** Signals & Systems  
**Thesis:** *Reinforcement Learning Approach for Inventory Replenishment.*

**University First Cycle Studies**  (Top 2% Nationally) 2013 – 2015  
Preparatory School For Engineering Studies of Tunis (IPEIT)  
*Tunis, Tunisia*  
**Major:** Mathematics-Physics

## AWARDS AND HONORS

- **Edmund O. Schweitzer III Scholarship** 2025-2026  
*School of Electrical Engineering and Computer Science, Washington State University*
- **Outstanding Research Assistant in Computer Science Award** 2024-2025  
*School of Electrical Engineering and Computer Science, Washington State University*
- **Outstanding Research Assistant in School of EECS Award** 2024-2025  
*Voiland College of Engineering and Architecture, Washington State University*
- **AAAI Student Scholarship and Volunteer Program** 2025  
*Association for the Advancement of Artificial Intelligence Conference*
- **NeurIPS Top Reviewer Award** 2024  
*Conference on Neural Information Processing Systems*
- **Mahmoud M. Dillsi Family Graduate Fellowship** 2023-2024  
*School of Electrical Engineering and Computer Science, Washington State University*

- **Alfred Suksdorf Fellowship** 2023-2024  
*Voiland College of Engineering and Architecture, Washington State University*
- **Tunisia National Rank 49 (Top 2%)** 2015  
*Qualification Exam for Engineering Schools Entrance*
- **Tunisia National Rank 379 (Top 2.5%)** 2013  
*Tunisian Mathematics Baccalaureate*

## PROFESSIONAL APPOINTMENTS

---

- Research Assistant** 2022 – Current  
EECS Department - Washington State University, USA,  
 • Offline Safe Reinforcement Learning.  
 • Offline Model Based Black-box Optimization.
- Machine Learning Fellow** 2021  
Fellowship AI, USA,  
 • Automation of domain specific chat-bots.  
 • Integration of RASA with Facebook's Blenderbot.
- Research Assistant** 2019 – 2021  
Department of Electrical Engineering - Qatar University, Qatar  
 • Development of reinforcement learning-based energy management system for school buildings.  
 • Development of deep learning-based load identification module.
- Applied Mathematics Engineer** 2018 – 2019  
ADAGOS, Tunisia  
 • Develop machine learning solutions based on company's neural networks tools.  
 • Work on internal research projects.
- Graduation Project Internship** 2018  
Infor, Tunisia  
 • Development of reinforcement learning-based inventory replenishment model.
- Research and Development Intern** 2017  
Mass Analytics, Tunisia  
 • Intelligent crawling via text mining techniques with topic modeling of outputs.

## PUBLICATIONS

---

1. [AAAI'26] Azza Fadhel, Yassine Chemingui, Minh Hoang, Aryan Deshwal, Trong Nghia Hoang, and Janardhan Rao Doppa. **Surrogate Modeling for Data-Driven Nanoporous Materials Discovery**. Association for the Advancement of Artificial Intelligence Conference (AAAI), 2026.
2. [NeurIPS'25] Yassine Chemingui, Aryan Deshwal, Alan Fern, Thanh Nguyen-Tang, Janardhan Rao Doppa. **O3SRL: Online Optimization for Offline Safe Reinforcement Learning**. Conference on Neural Information Processing Systems (NeurIPS), 2025.
3. [AAAI'25] Yassine Chemingui, Aryan Deshwal, Honghao Wei, Alan Fern, Janardhan Rao Doppa. **Constraint-Adaptive Policy Switching for Offline Safe Reinforcement Learning**. Association for the Advancement of Artificial Intelligence Conference (AAAI), 2025 (**Oral**).
4. [AAAI'24] Yassine Chemingui, Aryan Deshwal, Trong Nghia Hoang, and Janardhan Rao Doppa. **Offline Model-based Black-Box Optimization via Policy-Guided Gradient Search**. Association for the Advancement of Artificial Intelligence Conference (AAAI), 2024.
5. [EECSS'21] Yassine Chemingui, Adel Gastli and Mahdi Houchati. **Deep Learning-based Electric Appliances Identification from their Switching-On Current Waveforms**. 7th World Congress on Electrical Engineering and Computer Systems and Sciences (EECSS), 2021.

6. [Energies'20] Yassine Chemingui, Adel Gastli and Omar Ellabban. **Reinforcement Learning-Based School Energy Management System**. Energies 2020.
7. [ICASET'20] Yassine Hchaichi, Yassine Chemingui, and Mariem Affes. **A Policy Gradient Based Reinforcement Learning Method for Supply Chain Management**. 4th International Conference on Advanced Systems and Emergent Technologies (ICASET), 2020.

#### PAPERS UNDER REVIEW

1. [ICLR'26] Yassine Chemingui, Aryan Deshwal, Thanh Nguyen-Tang, Alan Fern, Janardhan Rao Doppa. **Constraint-Aware Reward Relabeling for Offline Safe Reinforcement Learning**. International Conference on Learning Representations (ICLR), 2026.

#### ACADEMIC AND PROFESSIONAL SERVICE

---

##### Program Committee Member at Top AI and ML Conferences

- International Conference on Learning Representations (**ICLR**) 2026
- Association for the Advancement of Artificial Intelligence (**AAAI**) 2026
- Conference on Neural Information Processing Systems (**NeurIPS**) 2025
- International Conference on Machine Learning (**ICML**) 2025
- International Conference on Learning Representations (**ICLR**) 2025
- Artificial Intelligence and Statistics (**AISTATS**) 2025
- Association for the Advancement of Artificial Intelligence (**AAAI**) 2025
- Conference on Neural Information Processing Systems (**NeurIPS**) — *Top Reviewer* 2024
- Association for the Advancement of Artificial Intelligence (**AAAI**) 2024

##### Tecahing Assistant

- Cpts 437: Introduction to Machine Learning Fall 2023

#### PROFESSIONAL REFERENCES

---

##### • Prof. Jana Doppa

Huie-Rogers Endowed Chair Professor of Computer Science  
*School of Electrical Engineering and Computer Science,  
Washington State University*  
✉ [jana.doppa@wsu.edu](mailto:jana.doppa@wsu.edu)

##### • Prof. Alan Fern

Professor of Computer Science and Associate Head of Research  
*School of Electrical Engineering and Computer Science,  
Oregon State University*  
✉ [alan.fern@oregonstate.edu](mailto:alan.fern@oregonstate.edu)

##### • Prof. Aryan Deshwal

Assistant Professor of Computer Science  
*Department of Computer Science and Engineering,  
University of Minnesota*  
✉ [adeshwal@umn.edu](mailto:adeshwal@umn.edu)

#### LANGUAGES

---

- Arabic: Native
- English: Professional
- French: Professional
- German: Basic