Zixuan Feng

+1 (352)664-0243 zixuan.feng@ufl.edu

Education

University of Florida, *Herbert Wertheim College of Engineering* — *Gainesville, FL, USA*
- **Ph.D.** in *Industrial and Systems Engineering* under **Dr. Aleksandr Kazachkov** — **Aug 2023 - Present**
- **M.S.** in *Computer and Information Sciences* — **Dec 2022**
  GPA: 3.86/4.0

Sorbonne University, former *University Pierre and Marie Curie (UPMC)—Paris VI* — *Paris, France*
- **M.S.** in *Computer Sciences* — **Oct 2021**
  track *Data Science, Machine Learning & Knowledge (DAC)*
- **B.S.** in *Computer Sciences* — **Jun 2019**
  GPA: 14.81/20, Ranking: 13/245, Graduated with first class honors

Research Interests

Discrete optimization, *especially for improving* ***cutting plane*** *methods in Mixed-Integer Linear Programming (****MILP****) solvers*
Computational Economics, *focus on theoretical guarantees for* ***fair allocation of indivisible resources***

Coursework

Math for Intelligent Systems	Advanced Machine Learning	Fundamentals of Mathematical Programming
Machine Learning	Game Theory for Economists	Linear Programming and Network Optimization

Research Projects

Learning to Disable Global Cuts in Branch-and-Cut — **Aug 2023 – Present**
Poster selected in the 2024 Mixed Integer Programming Workshop
Presentation invited for INFORMS 2024 Annual Meeting
With K. Konuru, A. M. Kazachkov, A. Vaidya

Effect on Social Welfare when Subsidizing Fairness on a Budget — **Jan 2023 – Present**

Tilting-based Cut Generation and Strengthening in MIP — **Jan 2024 – Present**

Other Experience

Research Intern, Aggregation Model for Computational Ethics — **Mar 2021 – Aug 2021**
Paris 6 Computer Science Laboratory (LIP6), Paris, France
- Defined behavior of different aggregation operators and mathematical properties with respect to computational ethics
- Applied hierarchical clustering on 93 combinations of operators to identify similar combinations
- Proposed a protocol to classify aggregation strategies and identify difficult ethical scenarios

Application of main ML, DL and RL algorithms — **Sep 2020 – Dec 2020**
- Employed different RNN structures on natural language sequence classification, forecasting and generation problems
- Applied CNN on Sentiment140 dataset for sentiment detection
- Randomly generated human face with GAN and DCGAN trained on CelebA and handwritten numbers with VAE and Convolutional VAE trained on MNIST

Service

Secretary, INFORMS Student Chapter at the University of Florida — **May 2024 – Apr 2025**

Teaching

Grader, *EIN 6905 Data Analytics for Social Good / ESI 4611: Advanced Data Analytics* — **Spring 2023**
Co-listed Graduate and Undergraduate Elective, UF ISE

Co-Instructor, *ESI 4611: Advanced Data Analytics*, Undergraduate Elective, UF ISE — **Scheduled Spring 2025**

Skills

Programming: Python, C++, Java, SQL, PL/SQL, C, HTML, CSS, JavaScript, PHP, F#, OCaml, XML, VB
Language: English (Fluent), French (Fluent), Chinese (Native Speaker)