

Education

- **École Normale Supérieure de Rennes, INRIA/IRISA, ECNU** Rennes, France
Ph.D. Candidate in Computer Science *Oct. 2017 - present*
 - Topic: Adversarial Context in Deep Learning;
 - Supervisor: Laurent Amsaleg, Yannis Avrithis, Teddy Furon, Aimin Zhou.
- **East China Normal University (ECNU)** Shanghai, China
M.S. in Computer Science, under ENS-ECNU PROSFER Program *Sep. 2015 - Jun. 2017*
 - Topic: Multi-Objective Evolutionary Algorithm;
 - Supervisor: Aimin Zhou;
 - ECNU “Outstanding Students Scholarship” in 2015 and 2016 (Top 5%).
- **East China Normal University (ECNU)** Shanghai, China
B.E. in Computer Science *Sep. 2011 - Jun. 2015*
 - Top 10%. GPA: 3.43/4.0;
 - “Top Student Scholarship”: First prize (2014); Second prize (2013); Third prize (2012).

Research Interests

My main research interests lie in machine learning, image processing, and optimization, specially under the context of security, adversarial attack and defense. I am dedicated to improve the robustness, privacy, efficiency and interpretability of machine learning related algorithms. I am also interested in multi-objective evolutionary optimization.

Publications

- Accelerating MOEA/D by Nelder-Mead Method**, Hanwei Zhang, Aimin Zhou, and Hemant Kumar Singh, IEEE Congress on Evolutionary Computation (CEC), 976-983, 2017.
- Tree-Structured Decomposition and Adaptation in MOEA/D**, Hanwei Zhang, and Aimin Zhou, 15th Parallel Problem Solving from Nature, 359-371, 2018.
- Smooth Adversarial Perturbation**, Hanwei Zhang, Yannis Avrithis, Teddy Furon and Laurent Amsaleg, EURASIP Journal on Information Security (1), 1-12, 2020.
- Walking on the Edge: Fast, Low-Distortion Adversarial Examples**, Hanwei Zhang, Yannis Avrithis, Teddy Furon and Laurent Amsaleg, IEEE Transactions on Information Forensics and Security 16, 701-713, 2020.

Skills

- Language Skills
 - Chinese: Native
 - English: C1 (IELTS: 7.0)
 - French: B1
- Programming Languages
 - Python, TensorFlow, PyTorch
 - C/C++, C#
 - Matlab, SQL, Shell/Bash, L^AT_EX, etc.

Projects and Research Experience

- **Knowledge Guide for E-Learning Online course**
Knowledge Graph Modeling *Mar. 2014 - Aug. 2014*
 - Investigated the similarity among keywords extracted from video courses.
 - Built a knowledge graph model among keywords.
- **Mathematical Contest in Modeling**
Problem Analysis and Modeling *Feb. 2014*
 - Tackled optimization problem using evolutionary algorithm.
 - Mathematical Contest in Modeling Participant Prize (2014).
- **Kaggle Data Competition**
Data Analysis and Processing *Oct. 2013 - Jan. 2014*
 - Analysed the web-page query logs via statistical approaches.
 - Implemented by SQL, python, Weka.
- **Identification of Paid Posts**
Data Analysis and Processing *Nov. 2012 - Nov. 2013*
 - Tackled Chinese word segmentation with string matching.
 - Extracted the features from texts.
 - Detected paid posts through decision tree.