

Louis DOUGE

NATIONAL UNIVERSITY OF SINGAPORE · INDUSTRIAL & SYSTEMS ENGINEERING · LOOKING FOR AN INTERNSHIP

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"Be the change that you want to see in the world."

Summary

Mathematician as well as a mechanical engineer by training, I am interested in applying Artificial Intelligence technics to real-world Operations Research problems. Though passionate about powerful algorithms and mathematical concepts, I have a deep interest for data analysis to create meaningful visualizations. I am astonished by the variety of such tools and I am always willing to learn more about them. Above all, I am convinced that a successful engineer is a charismatic team player, and that is what I am aiming at.

Education

National University of Singapore

Singapore

MASTER OF ENGINEERING - INDUSTRIAL & SYSTEMS ENGINEERING (DOUBLE DEGREE PROGRAM)

Aug. 2016 - PRESENT

- Vehicle Routing Problem with Stochastic Demand inspired by real logistics companies.
- Reinforcement Learning (OpenAI gym Python library), Large datasets on Traffic flow
- Neural Networks (MLP, RBF, SOM, Markov Decision Processes)

ENSTA ParisTech (Master's degree, year 1) - "Grande École"

Paris, France

"DIPLOME D'INGÉNIEUR" CURRICULUM

Sept. 2015 - May 2016

- Stochastic Calculus and Statistics for Finance
- Stochastic Algorithms - Martingales - Markov Chains
- Option Pricing using generic Monte-Carlo methods (C++) - Chess player program (C++)

ENSTA ParisTech (Bachelor's degree) - "Grande École"

Paris, France

"DIPLOME D'INGÉNIEUR" CURRICULUM

Sept. 2014 - June 2015

- Double Major in Applied Mathematics and Mechanics
- Digits recognition using Kohonen Maps (Python) - Finite Element Method (Matlab)

Lycée Sainte-Geneviève (Bachelor's degree)

Versailles, France

"CLASSES PRÉPARATOIRES" - PREPARATORY CLASSES

Sept. 2012 - Jul. 2014

- Major in Mathematics, minor in Physics

Experience

New York University - Computer Science Department

NY, USA

RESEARCH INTERN - SUPERVISOR: BHUBANESWAR MISHRA

May. 2016 - Jul. 2016

- Simulated Natural Language Evolution through artificial dialogs
- Bayesian Echo Chamber, Kohonen Self-Organizing Map, Word2vec algorithm

Ignity Inc. - Precision oncology company

San Diego, USA

SUMMER INTERN

Jul. 2015 - Aug. 2015

- Coded promotional movies dedicated to investors (PyMOL Python Library).
- Assisted a scientist for data collection from a synchrotron, and protein purification

Forum Trium - International Company Fair

Paris, France

VICE-PRESIDENT

Jan. 2015 - Jan. 2016

- Budget: €200K - 150 companies in Parc des Expositions, Paris.
- Team management, responsible for fire safety and security, promotion of the event

Technical Skills

Languages

- French: Native
- English: Full Professional Proficiency
- Spanish: Intermediate

Programming Skills

- Core Competences: Python (2.7 and 3.5), C++
- Python packages: Numpy, Matplotlib, Scikit-learn, tweepy, Basemap...
- Others: Matlab, R, C, XHTML/CSS, SQL, Javascript (D3.js)

Computer Skills

- OS: Mac OSX, Linux (Ubuntu), Windows
- Git: <https://github.com/doulouUS>
- Latex, Microsoft Suite, Adobe Photoshop

Award

Scholarship - Fondation de Coopération Scientifique - Université Paris-Saclay

Paris, France

May 2016

Awarded after selection process, to help conduct my NYU's research project.

Personal Interests

HOBBIES INCLUDE

- Ski (Competition level), Golf (licensed)
- Sailing (crew member & Sponsor manager at ENSTA's sailing association) see www.enstaquet.ensta-paristech.fr
- Mountain Trailing, Traveling (17 Countries)
- Photography and Classical Piano