RIADE BENBAKI

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A computer science and optimization student

EDUCATION

Ecole Polytechnique, Paris

August 2018 - Present

A highly selective Masters level engineering school.

GPA: 3.9

Majoring in Algorithmic and Efficiency, with courses computer vision and optimization

President of AI Student Association

LYDEX, Benguerir

August 2016 - August 2018

Intensive 2-year university level preparation in Maths and Physics

First in National Exam (CNC)

PROJECTS

Research project on evolutionary algorithms

September 2020 - Present

Working, with Prof. Benjamin Doerr, on ant-colony optimizers and their runtime on jump functions

Microsoft Silver Lining Chatbot Challenge: First Place

 $July\ 2020$

Created CARE, a COVID-19 traveling advice bot, using BOT Framework and Azure services, in the context of a 2-day hackathon for Microsoft interns.

ICPC Ecole Polytechnique Championship 2020 finalist

June 2020

As an individual participant in the contest, which contained 5 problems with difficulty comparable to the World Finals of the ICPC (International Collegiate Programming Contest)

Optimizing user distribution over communication channels

January 2020

Comparing efficiency of different approaches (Greedy, LP solvers, Dynamic programming and Branch and Bound) to solve a multi-choice knapsack problem.

Topic clustering within chatbots, with Accenture

September 2019 - April 2020

Working, in a team of 4 people, on different NLP techniques to enhance context change detection in conversations. Designed a transfer learning based algorithm achieving an F1-Score of 0.93

Ecole Polytechnique AI Hackathon: First Place

September 2019

With a team of 4, working on xView2 challenge to assess damage in buildings after a disaster from satellite images, before and after disaster.

EXPERIENCE

SNCF: French National Railway Company, Paris

June 2020 - August 2020

Data scientist and ML engineering intern

· Conceiving models to estimate incidents duration intervals in network. Work involving multivariate time series analysis and clustering to better define incident duration and detect delay patterns

Technical University of Denmark, Copenhagen

July 2019 - August 2019

 $Research \ assistant$

· Worked on McStas project, a software to simulate neutron scattering experiments. Developed new sample environments and debugged a new software component, using Python.

XProjets, Paris

January 2019 - May 2019

Software Engineer

· Worked in the school's junior Enterprise to migrate a website from an outdated CMS to Wordpress, which included re-writing all the templates and adapting the website's functions to Wordpress.