# Salah GHAMIZI PhD candidate @ Snt-University of Luxembourg

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#### Education

#### SnT - University of Luxembourg

PhD Candidate: Robust & Secure Deep Learning

#### 2019-2022

### Relevant papers:

- Ghamizi, Salah & Cordy, Maxime & Papadakis, Mike & Le Traon, Yves. (2021). Evasion Attack STeganography: Turning Vulnerability Of Machine Learning To Adversarial Attacks Into A Real-world Application; ICCV21; to appear.
- Ghamizi, Salah & Renaud Rwemalika & al. (2020). Data-driven
   Simulation and Optimization for Covid-19 Exit Strategies. KDD 2020;
   Best Paper Award; 10.1145/3394486.3412863
- Ghamizi, Salah & Cordy, Maxime & Papadakis, Mike & Le Traon, Yves. (2020). Search-based adversarial testing and improvement of constrained credit scoring systems. ESEC/FSE 2020; 10.1145/3368089.3409739
- Ghamizi, Salah & Cordy, Maxime & Papadakis, Mike & Le Traon, Yves.
   (2019). Automated search for configurations of convolutional neural network architectures. SPLC 2019; 10.1145/3336294.3336306.

# GeorgiaTech / IAE Metz (France);

2016-2017

I-Corps/ Msc Entrepreneurship & Management of Innovative Businesses Relevant Coursework: Agile & Lean Projects, Team Management, Funding Proposal writing

# MinesNancy, School of Computer Science

2012-2016

Bachelor then Master in Artificial Intelligence and Robotics

Relevant Coursework: Algorithms, Data Structure, Artificial Intelligence, Image Analysis, Computer Architecture, Distributed Systems, Databases, Mobile & Web development, Probability & Statistics, Operations Research Capstone projects:

- ReTypograph; Using OpenCV-JAVA, text extraction & automated generation of text fonts from raw pictures of historical records (2014).
   Paper: Lamiroy, Bart & Bouville, Thomas & Blégean, Julien & Cao, Hongliu & Ghamizi, Salah. (2015). Re-Typograph Phase I: a Proof-of-Concept for Typeface Parameter Extraction from Historical Documents. Proceedings of SPIE The International Society for Optical Engineering. 9402. 10.1117/12.2075813.
- iCrisis; tracking & prediction of crowd behavior in emergencies using video analysis with Optical Flows, wearable motion sensors and RNN algorithms (2016).

#### Work Experience

# LumApps SAS, R&D Engineer

March 2018 December 2018

In charge of the improvements and deployment process of the platform of some of the company's major clients (Decathlon, Veolia,...) and implemented third party API integration Set up the open source SDK of the company, and supervised the continuous delivery & testing architecture of the SDK

## WAZA Education, Cofounder and CTO

Sept 2016 March 2018

Fullstack lead engineer of a team of 3 people :

- Built the MVP & Production platform using Angular & LAMP stack.

  Migrated the application to a GCloud scalable architecture with continuous deployment with Bitbucket pipelines. Sped up common user interaction up to 800% by refactoring runtime complexities & implementing caching and one-way bindings
- Developed the scrapping and web-parsing platform based on DomJS/NodeJs frameworks.
- Designed and implemented our Natural Language Processing pipeline and models using NLTK (Python) and StanfordNLP (Java) for POS Tagging, NER and Bayesian classifiers.
- Managed the various projects with SCRUM and test driven development processes.

# PEEL - University Of Lorraine,

Software Engineer on project Edstore

March 2016 Sept 2016

- Built an Al algorithm and a platform to match Master thesis subjects proposed by business partners with courses taught in the university.
- Designed a recommender algorithm (content-based filtering). Using tf-idf and Kmeans for clusters, MLP and KNN algorithms for quasi-realtime recommendation.

Inria Grand Est, Research Intern June 2014 Sept 2014

Worked on the Cortex Project to build a new model for « Central Pattern Generator » based learning processes: Compared and improved Rowat-Selverson/Matsuoka models using a neural network based on dynamic Hebbian Learning (bio-inspired model for unsupervised learning).

#### Skills

#### **Proficient in**

TypeScript (Angular/React), Python (Tensorflow & Keras / Flask);

# **Experienced with**

SQL, Java, Google Cloud Tools, GIT & SVN, Unit Testing, EndToEnd Testing Al: Scikit-learn, Pandas, StanfordNLP, Classification algorithms, Recommender systems, LAMP & MEAN stacks (NodeJs RESTful web services), Hybrid mobile development,

#### Familiar with

Iphone & Android Native, Matlab, C, C++, Spark & RDFS, MapReduce, Hadoop

#### Recent Awards & Interests

**i-LAB**, **Pépite (2017)** - Awarded 6000\$ from the *French Ministry of Research & Innovation for my NLP work on WAZA (400 candidates).* 

EcoRevolutions (2016) - Awarded 12000\$ from the "GrandEst" State for Edstore/WAZA project

Imagine Cup (2016) - Finalist of the competition held by Microsoft France for project Edstore

**Sport**: Badminton **Music**: New Age

Organizations: Junior Chamber International (project leader), TEDx MinesNancy (Founder)

#### Languages

French | Arabic

**Mother tongues** 

English

Fluent, C2 level; Cambridge Advanced Examination

Japanese
Basic notions
N4 level in Japanese Language Proficiency Test