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## Driven and curious software engineer with a broad skill set. From user-centered design and web development to game development and deep learning.

# Education

**2011 – 2016 -** Master of Computer Science specialized in Human Computer Interaction (Toulouse, Paul Sabatier)

# Work experience

## Software Engineer at [Piktiv](http://piktiv.se/) (Since March 2017)

**Project:** Automatically classify and summarize emails from different service providers.(2 months)

*(Python, Keras, Tensorflow, Pandas, Flask, Docker)*

* Implemented a pipeline to transform json data into training data for the neural networks.
* Created a CNN based neural network, achieving >99% classification accuracy on the test set.
* Combined CNN and LSTM layers to achieve an F1 score of 0.95 on sentence level for summarization.
* Created an http server to easily deploy the algorithm in a docker container.

## Project: Maintain and improve an affiliate program web application for a big forex broker (1,5 years)

## *(Java EE, Groovy, Gradle, Oracle SQL, HTML, LESS, Typescript, Windows, Linux, Docker)*

* Automated the deployments to greatly decrease the failure rate and reduce time spent on deploys.
* Talked directly with the client’s team to gather requirements and bug reports.
* Created a tool to generate SQL code, removing 500 lines of duplicated code.

## UX Design Intern at [CityMeo](https://citymeo.fr) (March 2016 – September 2016)

## Project: Analyze and improve the usability of a web application

## *(HTML, CSS, JavaScript, Python – Django, Linux, Axure)*

* Created a prototype for a future version of the web application using Axure
* Documented usability problems on the application with and corrected some of them directly.
* Conducted interviews with around 15 end users to create 6 user personas.

# Personal projects

## Reinforcement Learning (Since January 2018) – 300h

Using and implementing RL algorithms *(Unity C#, Python, Tensorflow, Linux)*

* Training AIs to play Slideball using [Unity Machine Learning Agents Toolkit](https://blogs.unity3d.com/2017/09/19/introducing-unity-machine-learning-agents/).
* Implemented and trained an actor critic algorithm to solve Atari breakout in [Open AI gym](https://gym.openai.com/)

## Slideball (September 2016 – December 2017) – 450h

A multiplayer sports game *(Unity C#, NodeJS)*

* Implemented a networking architecture based on peer to peer and WebRTC.
* Created a browser game that is easy to pick up and play with friends.

# Other

**Hobbies:** Video Games, Fitness, Improvisational Theatre, Climbing, Reinforcement Learning

**Languages:** French native, English highly proficient, Swedish basic

You can learn more about my personal projects on my portfolio website: [**lesphax.github.io/**](http://lesphax.github.io/)