Thomas BARRAS

✉ thomas.barras26@gmail.com

Employment

2016 Summer IRIT/CNRS Intern	**Cross-platform mobile app** ● Implemented a cross-platform mobile app for client drawing recognition with ionic2 (Angular2 + Cordova),Node.JS + Express, MongoDB. ● Suggested to work with web technologies to build cross-platform apps.	2-person project

Education

2016–2017 Master	**Computer Science** ● Artificial Intelligence, Data mining, Big data, Security, Cryptography, Algorithms, Data structures, Web semantic	UQAC, Canada
2014–2017 Master	**Computing and Applied Mathematics** ● Functional programming, OOP, Operating Systems, Algorithms, Data structures, Web, Semantic and languages translations, Concurrency, Meta-Programming, Numerical Optimization, Linear algebra, Hilbertian analysis, Differential Calculation, Integration, Probabilities, Statistics	ENSEEIHT, France

Projects

2017	**DCGAN image generator** ● Implemented a deep learning image generator based on Generative Adversarial Networks (Python+ TensorFlow).	1-person project
2017	**Constraint Satisfaction Solver** ● Implemented a graph constraints-based solver and applied it on sudoku game. (Python + OCaml) ● Reduce number of backtrack calls by x600.	1-person project
2017	**Inference Engine** ● Implemented an inference engine to make artificial intelligence choosing the best moves for playing video game. (Javascript)	1-person project
2016	**Neural-cryptography** ● Implemented a cryptographic protocol to exchange key based on neural networks synchronization. (Python) ● Prevent quantum computing with algorithm that is not based on any number theory.	1-person project
2016	**C# compiler** ● Implemented a C# compiler to generate simplified assembly language. (Java)	2-person project

Technologies

Languages	**Java, Go, Javascript, C, Python, OCaml**
Frameworks	**NodeJS, AngularJS, MongoDB**