# Florian BENAVENT

DATE OF BIRTH: June 12th 1991 NATIONALITY: French

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PERMIT: B Working Permit wanted

#### WORK EXPERIENCE

Oct 2015-2018

PhD in computer science, Greyc Research Lab, Univ. of Caen Normandie Integrate recommendation in autonomous digital system

Create and integrate models of recommendation understandable for any user in an uncertain markov decision process. Analyze performances for each actual algorithm then propose an approximate alternative. Generalize uncertain MDPs to multi-users

situations.

Oct 2015-2018

Teaching, University of Caen Normandie

Teaching missions during PhD

Python, Project management (alone and with a team), Spreadsheet, Supervised annual

project or internship.

Mar-Aug 2015

Internship: Greyc Research Lab, University of Caen Normandie Theorical study on recommendation system inside a high-frequency trading system.

SEP 2013-AUG 2014

Internship: Greyc Research Lab, University of Caen Normandie

Develop a library in Java for various common algorithm of A.I. Initially based on markov decision process and reinforcement learning then extended to other fields of A.I..

MAY-AUG 2012

Internship: HydrOcean, Nantes, France

Contribute to developing a naval software suite on C++ with Qt and VTK libraries.

Develop a naval tool to optimize on c#/.net .

SEP-DEC 2010

Internship: Veolia Umweltservice Management Suisse SA

Add new functionality on the open source software GLPI (IT Management) in php and

mysql.

### **PUBLICATIONS**

Feb 2018 An Experimental Study of Advice in Sequential Decision-Making under Uncertainty

32nd AAAI Conference on Artificial Intelligence, New Orleans, USA

JUL 2016 Short article: Integrate basic recommendation in a MDP

(Original title: "Intégration de recommandations simples dans un MDP") 11th French days for planning, decision making and learning (JFPDA 2016)

Grenoble, France

### **EDUCATION**

SEP 2015 Master in Computer Science, University of Caen Normandie, France

Specialty Decision making and optimization, Promotion major

SEP 2014 Graduate Diploma in Information technology (Master Level), Epitech, Paris, France

Professional Certification Level 1 (France) and Level 7 (Eu) registered with RNCP

2012-2013 Exchange year in Laval University, Québec, Canada

## LANGUAGES

FRENCH: Mother tongue

ENGLISH: Fluent (Toeic: 855 in 2014)

### COMPUTER SKILLS

Languages and Libraries

Advanced: Java, C++, C, QT

Intermediate: C#, .net, Python, SQL, PHP, HTML, SFML, SDL

Basic: Prolog, Ocaml, CSS, Autoit, Unity

Algorithms

Advanced: Markov Decision process (MDP, POMDP, Dec-MDP, IRMDP...),

Reinforcement Learning (QLearning, Monte-Carlo...)

Intermediate: Metaheuristic (Genetic Algorithms, Simulated annealing...),

 $Recommendation \ system \ , \ Graph \ of \ trust$ 

Basic: Constraint programming, Neural network

**Tools** 

Project management: CMake, Git, Svn, Mercurial

Others: Latex, IDE (visual studio, eclipse...), ...

#### REFERENCES

Professor Bruno Zanuttini, Thesis director Oct 2015-2018 Contact: bruno.zanuttini@unicaen.fr, +33 2 31 56 74 84.

#### **INTERESTS**

· Automated planning and decision making.

• Autonomous and Semi-autonomous systems.

• Applications: Robotics, Aerospace, Medicine.

• Procedural generation