# **Guillaume Allain**

18 Oxford Castle OX1 1AY Oxford Mobile: +44711033853

guillaume.allain@gmail.com



## **Profile**

An experienced data scientist with a strong industrial and academic background in statistics and machine-learning, dedicated to solving real-world big data problems. Fluent in data analysis and visualisation tools like Python and R, he also has a proven experience in enterprise-level software development and team management. Also has great communication skills towards technical or business audience honed during his Ph.D. and throughout his work experience.

## **Work Experience**

#### 2013 - 2015 Senior data scientist and engineer at Blinkbox Music, Oxford

- Bringing in a mixture of math and engineering skills to the recommendations team at <a href="http://www.blinkboxmusic.com/">http://www.blinkboxmusic.com/</a>, powering algorithmic playlist generation and various personalised products based on users' consumption data (billions of data points per day)
- Implementing off-line and on-line algorithms using a mix of big data technologies and python scientific libraries
- Devising and refining on-line and off-line metrics to validate hypotheses and new algorithms through AB testing

#### 2011 - 2013 Team lead at Mediamobile, Paris

- Leading a 5 persons software development team powering the data collection and aggregation back-end of a pan-European road traffic information services editor (<a href="http://v-traffic.com">http://v-traffic.com</a>)
- Supporting sales and marketing team by providing visual and quantitative materials for public relation communications

#### 2008 – 2011 Data scientist at Mediamobile, Paris

- Evaluating new data feeds, mining business crucial information through ad-hoc analysis and visualisations
- Experimenting and implementing with cutting edge statistical models (anomaly detection, robust statistics) through a collaboration with an academic laboratory

#### 2005 – 2008 Postgraduate student at Mediamobile

- Academic and industrial collaboration about Road traffic forecast and analysis through statistical methods resulting in a commercial product
- Analysis and statistical modelling using R

### **Education**

#### 2005 - 2008

#### Postgraduate degree in applied mathematics and statistics

- Graduated from Université Toulouse III with Professors Fabrice Gamboa and Jean-Michel Loubes from the statistical team of <u>Toulouse</u> Mathematics Institute as doctoral advisors
- Writing a PhD thesis and scientific publications

#### 1999 to 2004

#### Master's degree at Institut National des Sciences Appliquées de Toulouse

- <u>French engineering school</u> in applied mathematics and statistics
- Machine and statistical learning theory and applications (neural network, SVM, generalised linear model, model selection theory)

#### 2003

#### **Natal University, Durban South-Africa**

• 6 months courses in financial mathematics and statistics

## Skills and expertise

#### **Data-Mining tools**

- Expert in Python's data toolkit (numpy, pandas, matplotlib and sklearn)
- Previously used of R statistical analysis and visual libraries (ggplot2)
- UNIX scripting (grep, awk, sed)
- NoSql and Sql databases (mongoDB, postgresSQL, hive, ...)
- Web-mapping APIs (Google Maps API, OpenLayers, Mapserver) and Geospatial database (postgres/postgis)

# Enterprise software • development •

- 5 years of experience with Microsoft's .NET framework and C#
- Application life-cycle management Visual Studio 2010/Team Foundation Server and IntelliJ/Jira)
- Used Java in several projects using latest libraries (Feign, Guice, Mockito)

# Software development methodology

- Promoting Agile and lean principles (YAGI, KISS, ...) in my current job
- Avid reader of technical books (Code Complete, Clean Code, ...)
- Accustomed to collaborate with decentralised team (remote working)

# Typesetting and editing software

- Regular use of Microsoft office suite for professional communication
- Intensive use of LaTeX for my thesis and scientific communications

#### Languages

- French as native tongue
- Full proficiency in English (used on a daily basis)

# **Availability**

- Eligible to work in the UK
- Tied with a 3 months notice with my current employer: 17<sup>th</sup> of August 2015