# FRANCOIS VAN LISHOUT

## PERSONAL INFORMATION



Born in Eupen, Belgium, 10 September 1980

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#### WORK EXPERIENCE

## 2016–Present Project Manager, Montefiore Institute

Montefiore Institute, Liège University, Belgium

Leading a team of four people on the RAGI project. Developping an artificial intelligence system able to welcome people entering into a building, differenciate between known and unknown persons, provide usefull information and guide them into the building. Working on the technical and buisness parts of the project. On my spare time, working on a project consisting in equiping the arm of a disabled person, who cannot communicate with its environement, with captors and use machine learning methods to differentiate between movements intending to try to communicate and sporadic ones. Developped skills: scrum master certification, Jira, JHipster, Tensorflow, entrepreneurship, buisness models, creativity, IBM Watson, captors, ... Reference: Louis Wehenkel · l.wehenkel@ulg.ac.be

## 2011–2016 PhD thesis, GIGA & Montefiore Institute

Giga & Montefiore Institute, Liège University, Belgium

PhD in statistical genetics: devlopment of an efficient and flexible software tool for detecting genetical factors influencing susceptibilty to disease. Teaching probability and statistics to bachelor students. Developped skills: C++, R, big data, running jobs on large clusters, advanced statistics methods, efficient oral communication, conferences organization, international collaborations, ... Reference: Kristel Van Steen · kristel.vansteen@ulg.ac.be

## 2009-2011 Software engineer, GIGA

Giga, Liège University, Belgium Development of a software tool for integreting, diffusing and exploiting biological knowledge coming from different research centers. Developped skills: Netbeans, postgresql, C++, big data, running jobs on large clusters, ... Reference: Xavier Tordoir · xavier.tordoir@kensu.io

## 2007-2009 Software engineer, Iknost

Iknost, Verviers, Belgium Developping a website for online remedial courses. Developped skills: Java EE, Eclipse, Struts, Hibernate, XHTML, XML, MySQL, CSS, JavaScript, Flex, SVN, Alfresco, ...

Reference: Vincent Reip · vincent.reip@yahoo.be

## 2004–2007 Teaching assistant, Montefiore Institute

Montefiore Institute, Liège University, Belgium Developping artificial intelligence software outperforming humans capabilities in games such as Sokoban and Backgammon. Collaboration with Maastricht university. Teaching programming, logic and artificial intelligence. Developped skills: teaching, scheme, classical AI algorithms, scientific writting, LATEX, ... Reference: Pascal Gribomont · gribomont@ulg.ac.be

## 2003-2004 Software engineer, Callataÿ & Wouters

Callataÿ & Wouters, Brussels, Belgium Developping B2N Software for well-known belgian banks. Consulting at crelan. Developped skills: Cobol, XSLT, vim, B2N, customer care, finance, ... Reference: Jean VASTEMANS · jva@c-w.be

## EDUCATION

2004-2006

Ph.D. in engineering, Liège University 2011-2016

Doctor of PhD thesis in statistical genetics: devlopment of an efficient and flexible engineering software tool for detecting genetical factors influencing susceptibilty to disease.

Master after Grade: highest distinction. Master thesis focused on game artificial intelligence master degree software. Winner of the AIM 2006 award for the best thesis in computer science.

> 1998-2003 M.Sc. in computer engineering, Liège University

M.Sc. in advanced engineering, Liège University

Software engineer Grade: high distinction. Master thesis in the field of bioinformatics: applying tree-based machine learning methods to diagnose different cancer types.

> 1992-1998 High school diploma, Athénée Royal Eupen

High school Grade: high distinction. Winner of 5 awards: best student in mathematics, diploma physics, sciences, discipline and school representation at the math olympiad.

LANGUAGES

French Mother tounge

German Very good knowledge (used daily)

English Very good knowledge (used daily)

SOCIAL ENGAGEMENT

Administrator, Réseau des doctorants 2014-2016

Réseau Des I was one of the four administrators of the Réseau des doctorants, an association Doctorants whose purpose is to bring together PhD students from Liège University. I took care of the finance, the organizations of the events (contact with invited speakers, cathering, logistic, ...), the contact with the representatives of the

different doctoral schools, ...

2011-2016 Scientific representative, FACULTY BOARD

Applied Sciences I was a scientific representative at the monthly faculty meeting, where many **Faculty** decisions impacting the applied sciences faculty are taken. My task was to defend the interests of the scientific members of the faculty.

> Scientific representative, Monteflore R.U. Board 2011-Present

Montefiore I'm a scientific representative at the Montefiore Research Unit Board. My task Research Unit is to discuss the strategic decisions with the other members and defend the Board interests of the scientific members of the departement.

> 2000-2003 Administrator, Centrale des cours de l'AEES

I was one of the main administrators of the Centrale des cours de l'AEES, a non-profit organization whose purpose is to cell scholar books to students. I

took care of the finance, the logistic, the celling process, ...

1998-Present Chess Teacher, KSK ROCHADE EUPEN-KELMIS

KSK Rochade I'm teaching chess to the youth players of the KSK Rochade Eupen-Kelmis chess

Eupen-Kelmis club.

Centrale des cours

de l'AEES

#### Conferences

I participated in the organization of CSCDA 2014, an international conference on complex disease analysis, which took place at the *Giga* (59 participants). I took care of the website, the contact with the invited speakers, the booking of the hotel rooms, ...

I was one of the main organizers of the CSCDA 2012 conferences, an international conference on complex disease analysis, which took place at the *Palais des Congrès de Liège* (78 participants). I took care of the website, the finance, the contact with the invited speakers, the booking of the conference and hotel rooms, the organization of the cathering and the social event, ...

# Team-building activities

I was one of the four organizers of the 1st *Montefiore Research Unit Day* 2017, a team-building type of activity, which took place at the Reinhardstein castle (80 participants). I took care of the selection of the location and activities, the contact with the speakers, the registrations, the car-sharing, the moderation, ...

I was the organizer of the 8th *Systmod Research Unit Day* 2014, a team-building type of activity, which took place at the Spa-Francorchamps circuit (48 participants). I took care of the selection of the activities and the cathering, the registrations, the finance, the moderation of the conference part of the day, the communication, ...

# Youth Chess Championship

I was one of the main organizers of the belgium youth chess championship 2005, which took place in Eupen (150 participants). I took care of the website, the photographies, the contact with the players, the logistic, ...

#### **PUBLICATIONS**

## Journal Articles

Van Lishout, F., Gadaleta, F., Moore, J. H., Wehenkel, L., & Van Steen, K. (2015). gammaMAXT: a fast multiple-testing correction algorithm. *BioData Mining*, 8(36).

Fouladi, R., Bessonov, K., Van Lishout, F., & Van Steen, K. (2015). Model-Based Multifactor Dimensionality Reduction for Rare Variant Association Analysis. *Human Heredity*, 79, 157-167.

Van Lishout, F., Mahachie John, J., Gusareva, E., Urrea, V., Cleynen, I., Theatre, E., Charloteaux, B., Calle, M. L., Wehenkel, L., & Van Steen, K. (2013). An efficient algorithm to perform multiple testing in epistasis screening. *BMC Bioinformatics*, 14, 138.

Mahachie John, J., Gusareva, E., Van Lishout, F., & Van Steen, K. (2013). A robustness study to investigate the performance of parametric and non-parametric tests used in Model-Based Multifactor Dimensionality Reduction Epistasis Detection. *BioData Mining*, 6(9).

Mahachie John, J., Cattaert, T., Van Lishout, F., Gusareva, E., & Van Steen, K. (2012). Lower-Order Effects Adjustment in Quantitative Traits Model-Based Multifactor Dimensionality Reduction. *PLoS ONE*.

Mahachie John, J., Cattaert, T., De Lobel, L., Van Lishout, F., Empain, A., & Van Steen, K. (2011). Comparison of genetic association strategies in the presence of rare alleles. *BMC Proceedings*.

Cattaert, T., Calle, L. M., Dudek, S. T., Mahachie John, J., Van Lishout, F., Urrea, V., Ritchie, M. D., & Van Steen, K. (2011). Model-Based Multifactor Dimensionality Reduction for detecting epistasis in case-control data in the presence of noise. *Annals of Human Genetics*, 75(1), 78-89.

Mahachie John, J., Van Lishout, F., & Van Steen, K. (2011). Model-Based Multifactor Dimensionality Reduction to detect epistasis for quantitative traits in the presence of error-free and noisy data. *European Journal of Human Genetics*, 19, 696-703.

International conference & Workshop papers

Van Lishout, F., Gadaleta, F., Moore, J. H., Wehenkel, L., & Van Steen, K. (2014). gammaMAXT: a fast multiple-testing correction algorithm. *ERCIM* 2014, *Pisa*, *Italy* 

Van Lishout, F., Bessonov, K., Duan, Q., Gusareva, E., Mahachie John, J., Tantishira, K., & Van Steen, K. (2013). Genome-wide environmental interaction analysis using multidimensional data reduction principles to identify asthma pharmacogenetic loci in relation to corticosteroid therapy. *Annual Society of Human Genetics Annual Meeting, Boston, USA*.

Van Lishout, F., Vens, C., Urrea, V., Calle, M. L., Wehenkel, L., & Van Steen, K. (2012). Survival analysis: finding relevant epistatic SNP pairs using Model-Based Multifactor Dimensionality Reduction. *ERCIM* 2012, *Oviedo, Spain*.

Van Lishout, F., Cattaert, T., Mahachie John, J., Gusareva, E., Urrea, V., Cleynen, I., Theatre, E., Charloteaux, B., Kvasz, A., Calle, M. L., Wehenkel, L., & Van Steen, K. (2011). An Efficient Algorithm to Perform Multiple Testing in Epistasis Screening. *Benelux Bioinformatics Conference, Luxembourg, Luxembourg.* 

Mahachie John, J., Gusareva, E., Van Lishout, F., & Van Steen, K. (2011). A robustness study to investigate the performance of parametric and non-parametric tests used in Model-Based Multifactor Dimensionality Reduction Epistasis Detection. 20th Annual IGES Conference, Heidelberg, Germany.

Demaret, J.-N., Van Lishout, F., & Gribomont, P. (2008). Hierarchical Planning and Learning for Automatic Solving of Sokoban Problems. *BNAIC 2008, Twente, the Netherlands* 

Van Lishout, F., Chaslot, G., & Uiterwijk, J. W. H. M. (2007). Monte-Carlo Tree Search in Backgammon. 12th Computer Olympiad, Amsterdam, the Netherlands

Van Lishout, F., & Gribomont, P. (2006). Single-player games: introduction to a new solving method combining classical state-space modelling with a multi-agent representation. *BNAIC* 2006, *Namur*, *Belgium* 

#### INTERESTS

Running

I run regularly since 2009. I'm specialized in marathons (best time 3 h 09 min 33 sec, Wien 2014) and half marathons (best time 1 h 28 min 12 sec, Köln 2014).

Chess

I play since 1994 for the club *KSK Rochade Eupen-Kelmis*. I'm in the top 250 of the Belgium rank list (2098 elo) and play mainly in the 2nd national league (reservist in the 1st league). I played the junior europeen championship (Avilez, 1999) and the FISU world championship (Istanbul, 2004).

Triathlon

Since 2011, I'm a member of the *Triathlon Team Eupen* club. I'm specialized in olympic distance (1500m swimming, 40km bike, 10km running).

Poker

I play poker since 2007. I'm particularily interested in the mathematics of poker, seen as a game of applied probability and statistics. I played the *World Series of Poker* (Las Vegas 2016).

Mindfulness

Mindfulness means maintaining a constant awareness of our feelings, thoughts, body sensations and environment. I followed a three-month training (Liège, Jan-March 2015). I gave the same training to two groups (Herbesthal, May-July 2015, Sept-Nov 2015).