Noé Gaumont

Ph.D. student at Université Pierre et Marie Curie

13 rue Gustave Simonet
94200 Ivry-sur-Seine
+33 6.77.79.86.28
noe.gaumont@gmail.com

Professional Experience

Since October 2013 — **Ph.D. student**, *Université Pierre et Marie Curie*, in the ComplexNetwork team, LIP6, Paris.
Community detection in link streams. Link stream provide a new way to understand temporal networks. A link stream is a sequence of timed interactions between two entities, *e.g.* email exchanges. In this context, a community should be a dense sub-stream, *e.g.* a discussion instead of a group of friends.

Feb 2013 - July 2013 — **End-of-studies internship**, *Thales Air System in the Innovation Lab*, Rungis.
Study and optimization of flight plan predictions on specific way-points.
Key concepts: machine learning, data extrapolation. *Languages:* C++, R.

Sept 2011 - Feb 2012 — **Software developer internship**, *Commissariat à l'énergie atomique (**CEA**)*, Brétigny-sur-Orge.
Design and development of an algorithm able to generate quadrilateral mesh under a vector field constraint and geometric constraints. *Key concepts*: paving mesh generation, finite element. *Language*: C++.

Education

Sept 2008 - July 2013 — **Engineering school**, *Université de Technologie de Compiègne*, in Computer Science, Compiègne.
IT project examples carried out during my university training:

June 2008 — **High school diploma in science**, specialty mathematics, with honors in lycée *Fulbert*, Chartres.

Technical skills

Mathematics — Graph theory, complex systems, mathematical optimization, meta-heuristics, constrained programming, Markov chain, basics in cryptography.

Computer — **Programming:** C++, Python, Rust, Lisp, PostgreSQL.
Software: Git/svn, Gephi/Tulip, Scilab.
Web: HTML, JavaScript, CSS, PHP.

Publications

International workshop

[1] Noé Gaumont, Tiphaine Viard, Raphaél Fournier-S'niehotta, Qinna Wang and Matthieu Latapy. Analysis of the temporal and structural features of threads in a mailing-list. In *Complex Networks VII*, Dijon, France. 2016. *Acceptation rate: 23%*

[2] Noé Gaumont, François Queyroi, Clémence Magnien and Matthieu Latapy. Expected Nodes: a quality function for the detection of link communities. In *Complex Networks VI*, New-York, USA. 2015. Long version of [3]. *Acceptation rate: 20%*

National conference

[3] Noé Gaumont and François Queyroi. Partitionnement des liens d'un graphe : Critéres et Mesures. In *Algotel - 16èmes Rencontres francophones sur les Aspects Algorithmiues des Télécommunication*, Ile de ré, France. 2014. *Acceptation rate: 55%*

[4] Noé Gaumont. Trouver des séquences de contacts pertinentes dans un flot de liens. In *Algotel - 18èmes Rencontres francophones sur les Aspects Algorithmiues des Télécommunication*, Bayonne, France. 2016. Short version of [5]. *Acceptation rate: 60%*

Under review

Journal

[5] Noé Gaumont, Clémence Magnien and Matthieu Latapy. Finding remarkably dense sequences of contacts in link streams. Submitted to *Social Network Analysis and Mining*.

Talks

"Bringing density to link streams reveals meaningful groups in contact traces" in workshop e-Young Researchers Network in Complex Systems. 2015: `http://cs-dc-15.org/e-tracks/global/#yr`

"Tools to study link streams" in workshop Outils d'analyse de la dynamique temporelle dans les réseaux in Toulouse, France. 2016

Tiphaine Viard and Noé Gaumont. LinkStreamViz: a drawing tool for link stream. In *Workshop Dynamics On and Of networks*.

Several presentation alongside the CODDDE French research project.

Scientific responsibilities

Member of the organizing committee of MARAMI 2014 and ASONAM 2015.

Reviewer for: SITIS 2015, WWW 2015, Algotel 2016, ICDE 2016 and Journal of Complex Networks.

Teaching and vulgarisation

Basics of C (100h) and python (20h) programming

Introduction to database with PostgreSQL (20h)

Animations in various places to teach children and adults:
- Learning HTML and CSS with paper cubes and Thimble.
- What stay private when surfing on the internet?

Talk at the CoFestival, an inclusice event to convey technical and scientific knowledge. Title: "How research works in computer science" with Tiphaine Viard.

Training

School on structure and dynamics of complex networks (2 weeks)

Rescom 2014 : Network Science (1 week)

Language skills

English — European level C1. Good working knowledge.
- *TOEIC score in 2012: 960/990.*

German — European level B2. Basic knowledge.

Interest

Open-source software (Mozilla), sport (bouldering, badminton).