

Jananan PATHMANATHAN

EDUCATION

2010-2012 : MSc. in Bioinformatics, University Paris Diderot - Paris 7, FRANCE

2009-2010 : MSc. in Immunology, University Paris Diderot - Paris 7, FRANCE

2006-2009 : BSc. in Life Sciences, University Paris Descartes, FRANCE

PROFESSIONAL EXPERIENCE

2012 – 2014 (1 year, 5 months): Research Engineer in Bioinformatics

Institution: CEA – Genoscope, CEA/DSV/IG/GEN/LGBM, Evry, FRANCE

Supervisor: Dr Thomas Brüls

Research activity: Molecular Approaches and MetaGenomic Investigations for optimizing Clean-up of PAH contaminated sites (MAGICPAH, EU-FP7 funded metagenomics project, www.magicpah.org)

- Metagenomic data analysis and assembly
- Metatranscriptomic data analysis and assembly
- Binning metagenomic data (i.e. – sequences, contigs, scaffolds)

2012 (7 months): Internship in Bioinformatics

Institution: King's College London, Division of Genetics and Molecular Medicine, UNITED KINGDOM

Supervisor: Dr Sophia TSOKA

Research activity: Computational Procedures for Pathways Analyses in Biomedical Data

- Gene expression analysis
- Pathway enrichment analysis
- Gene networks

2011 (4 months): Internship in Bioinformatics

Institution: IMPMC, UMR7590 CNRS, Campus Jussieu, FRANCE

Supervisor: Dr Dirk STRATMANN

Research activity: Prediction of the assembly of protein-protein complex from an analysis of structural fragments

- Development of a program which decomposes a protein structure into subdomain fragments (TEF 2.0)
- Source code available on IMPMC web site: <http://www.impmc.upmc.fr/software/tef/>

COMPUTATIONAL SKILLS

- Operating Systems : Linux, Windows
- Job Schedulers : LSF, SLURM
- Programming Languages : Perl, Python, Bash, Java, C/C++
- Web : HTML, CSS, JavaScript
- Database : SQL, PostgresSQL, MySQL
- Statistical Analysis : R

LANGUAGE SKILLS

- French : Native
- Tamil : Mother tongue
- English : Fluent
- Spanish : Basic

CONFERENCE ABSTRACTS

D. Stratmann, **J. S. Pathmanathan**, M. Carpentier and J. Chomilier (2013). TEF 2.0: Tightened End Fragments of globular proteins. GGMM 2013 (*XVIIIe congrès du Groupe de Graphisme et Modélisation Moléculaire*), Saint-Pierre d'Oléron, FRANCE

D. Stratmann, N. Prudhomme, M. Chlioui, **J. S. Pathmanathan**, M. Carpentier and J. Chomilier (2011). Analysis of Protein-protein Interactions at the Subdomain Level. JOBIM 2011 (*Journées Ouvertes en Biologie, Informatique et Mathématique*), Institut Pasteur, Paris, France

D. Stratmann, N. Prudhomme, M. Chlioui, **J. S. Pathmanathan** and J. Chomilier (2011). Classification of structural fragments involved in protein-protein interactions. GGMM 2011 (*XVIIe congrès du Groupe de Graphisme et Modélisation Moléculaire*), La Rochelle, France

REFEREES

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