Stéphane Couvreur (MEng)

SUMMARY

I am a young and hard working team player interested in data science. I have a passion for computers and numerical modelling of systems. My dream is to continue to work on multidisciplinary projects and meet new colleagues from diverse backgrounds and fields.

EXPERIENCE

JUNE 2017 – PRESENT

Research Assistant
Great Ormond Street Hospital, London

Embedded in a team of engineers and clinicians working on applications of data science in paediatric cardiology. Developed data mining and unsupervised machine learning tools in Python and R to extract useful clinical patterns in cardiac magnetic resonance imaging (CMRI). Used the GPU computing capabilities from the CUDA library to improve performance.

SEPTEMBER 2016 - JUNE 2017

Engineering Project Student
UCL Shell-Eco Marathon Team

Designed the interior components and steering system on the UCL entry for the Shell Eco-Marathon competition in the London Olympic Park in June 2017 using CATIA V5 and Matlab. The design goals set out were to create the most fuel-efficient vehicle by reducing vehicle weight to under 40 kg and optimising the hydrogen fuel cell propulsion system (budget ~£11.5k).

JUNE 2016 – SEPTEMBER 2016

Research Intern
Great Ormond Street Hospital, London

Processed clinical MRI and CT data to model the left ventricular outflow tract, and created patient specific blood flow simulations in CFD using ANSYS Fluent in an EPSRC funded project. Modelled aortic valve behaviour using a fluid-structure interaction model in LS-DYNA. Improved time-management skills while working under pressure from both engineering and clinical teams. Gained experience in clinical implantations and repairs through shadowing in a paediatric cardiac theatre.

COMMUNICATION SKILLS

POSTERS	UCL Launch Campaign – 2016

COMPUTER SKILLS

Intermediate Knowledge	Adobe Illustrator, Matlab LaTeX, Git
Advanced Knowledge	CATIA V5, ANSYS, LSDYNA Python, R, Bash, SQL

🏠 | Flat 31 Aspen House, Maitland Park Villas
NW3 2EH, London, UK
☎ | +44 (0) 783 522 0001
✉ | stephane.couvreur.sueron@gmail.com
in | LinkedIn
⌗ | GitHub

EDUCATION

2013 – 2017	**Master of Engineering (1st, Hons)** MECHANICAL ENGINEERING *University College London (UCL)* Specialization in medical engineering and computing
2010 – 2013	**French Baccalaureate (Hons)** SCIENCES *Lycée François 1er Fontainebleau* Specialization in mathematics, physics and chemistry (A*A*A)

AWARDS

2017	**EPSRC Summer Studentship Prize** Awarded to a summer studentship student for the best research project from a pool of 30 candidates.
2016	**Blonstein Prize** Awarded to a third year student for the best overall performance in Design.

INFORMATION

LANGUAGES	English, French - fluent Spanish, Italian - conversational
MEMBERSHIPS	Institute of Mechanical Engineers

REFERENCES

DR. TORII	*Project Supervisor* Mechanical Engineering Dept, UCL ✉ | r.torii@ucl.ac.uk
DR. CAPELLI	*Project Supervisor* Great Ormond Street Hospital, London ✉ | c.capelli@ucl.ac.uk
DR. SAUVAGE	*Project Supervisor* Great Ormond Street Hospital, London ✉ | e.sauvage@ucl.ac.uk