

# Alan LE GOALLEC

Phone: +33642154289

E-mail: [al724@cam.ac.uk](mailto:al724@cam.ac.uk)

## EDUCATION

- **University of Cambridge**, M.Phil in Bioengineering. (2014-2015)  
Effect of a modified gravity on dicty's growth process. Design of the centrifuge and the camera system.
- **Ecole des Ponts ParisTech**, Bachelor and Master of Science in Engineering. (2011-2015)  
(Recruits among the top 5% of students from elite preparatory classes)
- **Lycee Marcelin Berthelot**, preparatory school for national exams. (2008-2011)  
Admitted to Ecole des Ponts ParisTech and Ecoles Normales Superieures (Percentile: 98).
- **Lycee Saint Louis Blanche de Castille**, Baccalaureate in Sciences with major in Maths, graduated with Highest Honors, percentile 99.6. (2008)

**Courses** Mathematics, Physics, Chemistry, Modeling of the Human Body, Data Analysis, Statistic, Probability, Cellular and Molecular Biomechanics, Mathematical Biology of the cell.

- Projects**
- Design of a passive ventilation system, mimicking the behavior of a pine cone. (2013)
  - Life-cycle analysis: ecological impact of three different hand dryer technologies. (2013)
  - Design and manufacturing of composites (tennis racket, snowboard): FEA & CAD. (2012)
  - Modeling of the human musculoskeletal system, limit of sports performance. (2012)
  - Development of a role playing videogame on C++. (2011)
  - Reduction of noise generated by car tires by varying the tire tread. (2011)
  - Testing of an ultrasonic cleaner by comparing absorbance of the cleaning waters. (2010)

## INTERNSHIPS

- **MIT, Center for Ocean Engineering** (5 Months in 2014)  
Fluid Mechanics: Mechanical response of a moving Blow-Out Preventer under external flow forces  
Computational Fluid Dynamics, Simulations Design, Data Visualization and Data Analysis.
- **University of Cambridge, Insect Biomechanics Workgroup** (5 Months in 2013/2014)  
Animal Biomechanics: Modeling and comparison of biological adhesive structures  
Finite Elements Analysis, Micromechanics, Simulation Design, Data Visualization and Analysis.
- **Harvard University, Occupational Biomechanics and Ergonomics** (2 Months in 2013)  
Human Biomechanics: Musculoskeletal disorders generated by work postures  
Experimental Design, Motion and EMG Data Collection and Analysis, Statistical Analysis.
- **Tongji University, College of Environmental Science and Engineering** (3 Months in 2012)  
Sustainable Energy: Solid waste treatment by anaerobic digestion modules  
Environmental Microbiology, Anaerobic Incubation, Data Analysis.

## SKILLS & INTERESTS

- Informatics** C++, Matlab, Statistical Analysis (R), Linux, Raspberry Pi, Arduino, FEA, CFD, CAD.
- Languages** French (native), English (IELTS: 8), German (proficient), Chinese & Latin (basics).
- Leadership** Freshman class representative. Administrations officer of Junior Enterprise of ENPC.  
English Debating Club of ENPC. Organisation of volleyball tournaments.  
Design of training and diet programs as Curator of the gym at ENPC.  
Captain of the first volleyball team of Ecole Nationale des Ponts et Chaussees
- Sports** Most Valuable Player in 2014 Cambridge-Oxford volleyball match.  
Competition: Tennis, Table Tennis, Swimming, Rowing, Skiing.