



INTERNSHIP PROGRAM FOR INTERNATIONAL STUDENTS

INTERNSHIP SUBJECT FORM



Name of the Host Laboratory	Computer Science Lab (LIX), Ecole Polytechnique
Website of the Host Laboratory	https://www.epizeuxis.net
Research Group	Epizeuxis Network Research Group
Internship Supervisor	Jiazi Yi jiazi.yi@polytechnique.edu
Internship Subject	Intelligent High Performance Computer Networks
Student's level	<input checked="" type="checkbox"/> Advanced Undergraduate Students (3 rd or 4 th year) <input checked="" type="checkbox"/> Master's students (1 st or 2 nd year) <input checked="" type="checkbox"/> PhD students
Proposed Duration	<input checked="" type="checkbox"/> 3 months <input checked="" type="checkbox"/> 4 months <input checked="" type="checkbox"/> 5 months <input checked="" type="checkbox"/> 6 months
Prerequisites	Major in computer science, network engineering, communication, electrical engineering or related fields. Good understanding and experiences in communication/network protocols, network simulation, programming (especially C/C++, Python, Java).
Internship description (max. 15 lines)	<p>The development of cloud computing, "big data" era and streaming of high-resolution video over computer networks triggers the demand of high performance network infrastructure. This internship project aims at proposing, designing and evaluating new intelligent network algorithms to meet the need of high performance networking. The topic will be studied by building analytical models to understand theoretical boundaries. Network simulation tools will be used to evaluate protocol performance and simulate large scale scenarios. Real testbeds will be built to validate the correctness of the proposals.</p> <p>To apply or for further information, please contact the internship supervisors.</p>