



INTERNSHIP PROGRAM FOR INTERNATIONAL STUDENTS

INTERNSHIP SUBJECT FORM

Name of the Host Laboratory	LIX – Computer Science Lab, Ecole Polytechnique
Website of the Host Laboratory	https://www.lix.polytechnique.fr https://www.epizeuxis.net
Research Group	Network Research Group
Internship Supervisor	Jiazi Yi jiazi.yi@polytechnique.edu
Internship Subject	An Internet-of-Things Platform for Energy Efficient Building
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, data analysis, programming (especially C/C++, Python, Java). Hands on experience with embedded/IoT devices such as Arduino, Raspberry Pi, environmental sensors, etc. is preferred.
Internship description (max. 15 lines)	<p>The development of energy-efficient building, distributed energy storage and management require a communication network to connect different components of the system from sensors to data centres. Ecole Polytechnique is building a demonstrator on its campus to explore the energy-efficient building for the future.</p> <p>This project aims at extending the existing experimental testbed to a platform that is able to accommodate multiple technologies and processing of collected data.</p> <p>Project introduction: https://jiaziyi.com/research-projects/x-ings/</p>

The boxes marked with cross implies eligible