CV - Ying Siu LIANG

Laboratoire d'Informatique de Grenoble (LIG), MAGMA team
Bâtiment IMAG, 700 avenue Centrale, 38401 St Martin d'Hères, France
Tel: +33 4 57 42 16 48 - Email: ying-siu.liang@imag.fr

Research Interests

Artificial Intelligence, Robotics, Human-Robot Interaction, Cobotics, Automated Planning.

Education

Université Grenoble Alpes, CNRS, LIG, F-38000 Grenoble (France) **Oct 16 – Sep 19**
PhD student in Computer Science funded by a French Ministry PhD research grant

Grenoble INP - ENSIMAG (France) **Sep 15 – Jun 16**
Research Master (MSc) in Informatics, specialised in Artificial Intelligence and Web

- Machine Learning, Multi-Agent Systems, Knowledge Representation and Reasoning, Natural Language Processing

Imperial College London (United Kingdom) **Oct 08 – Jun 12**
Integrated Master in Science (MSci) in Mathematics and Computer Science

- Graduated with First Class Honours

Publications and Communication

[1] Y.S. Liang, D. Pellier, H. Fiorino, S. Pesty. **Robot Programming by Demonstration in Cobotic Environments: First user experiments.** In International Conference on Mechatronics and Robotics Engineering (ICMRE), pp. 30-35, Feb 2017, Paris (France). (Oral presentation)

[2] Y.S. Liang, D. Pellier, H. Fiorino, S. Pesty. **Evaluation of a Robot Programming Framework for Non-Experts using Symbolic Planning Representations.** In International Symposium on Robot and Human Interactive Communication (RO-MAN), Sep 2017, Lisbon (Portugal). (Poster)

[3] Y.S. Liang, D. Pellier, H. Fiorino, S. Pesty, M. Cakmak. **Simultaneous End-User Programming of Goals and Actions for Robotic Shelf Organization.** In International Conference on Intelligent Robots and Systems (IROS), submitted in Mar 2018. (In Review)

Work Experience

Visiting Researcher, Human-centered robotics lab, Univ. of Washington (USA) **Jul 17 – Dec 17**
Simultaneous End-User Programming of Goals and Actions for Robotic Shelf Organization [3]

- Developing a robot programming framework for end-users to teach robots shelf organization tasks using Programming by Demonstration and Goal Inference

PhD Student, MAGMA Team, LIG, Université Grenoble Alpes (France) **Oct 16 – Oct 19**
Robot Programming for Non-experts in Cobotic Environments (continuation of Master project)

- Developing a robot programming framework for non-expert users to teach a robot atomic actions by demonstration
- Atomic actions are used to derive action sequences in order to achieve complex goals
- Areas of focus: Programming by Demonstration, Robotics, Automated Planning

Master Research Intern, MAGMA, LIG, Université Grenoble Alpes (France) **Feb 16 – Jun 16**
Robot Programming by Demonstration in Cobotic Environments [1]

- Created a prototype of a robot programming framework with a Baxter research robot
- Conducted qualitative user experiments to evaluate the framework's usability

Grants and Honours

IDEX Grenoble Alpes University international mobility grant **Jul 2017**
- Collaboration with University of Washington

French Ministry PhD research grant by MSTII Doctoral School (ED MSTII) **Jul 2016**
- "Robot Programming by Demonstration" (3 years)

Associate of the Royal College of Science, United Kingdom **Aug 2012**

Skills

Technical profile
- ROS, Ubuntu Linux, Visual Studio 2008, IntelliJ IDEA, QlikView, MATLAB
- Python, C++, Java, C#, SQL, JavaScript, HTML
- Version control: GitHub
- Previous experience with: C, Scala, PHP, Prolog, Haskell, Perl, x86 assembly

Language skills
German (native), English (fluent), French (fluent), Spanish (beginner), Chinese (mother tongue)

Other activities

PhD presentation at "2 minute madness", LIG PhD day, (Grenoble, France) **Mar 2018**
PhD presentation at "2 minute madness", ED MSTII PhD day, (Grenoble, France) **Mar 2017**
Oral presentation at the ACAI workshop (Paris, France) **Jun 2017**
Student Volunteer at HRI 2017 (Vienna, Austria) **Mar 2017**
Undergraduate Teaching Assistant for *Introduction to databases* (Grenoble, France) **Feb 2017**