

問題発見型／解決型学習(FBL/PBL) (社会情報学専攻)
 テーマ提案 (学生募集) / Project Proposal

テーマ名称 Project name	ブロックチェーン技術を用いた新しい社会システムの探索 Exploring New Social Systems with Blockchain Technologies
実施責任者 Instructors	Toru Ishida: Professor, Department of Social Informatics
実施協力者 Collaborators	Donghui Lin: Assistant Professor, Department of Social Informatics Yoshinori Hara: Professor, Graduate School of Management
テーマの背景 Background	<p>A blockchain, is a continuously growing list of records, called blocks, which are linked and secured using cryptography. A blockchain is inherently resistant to modification of the data. Once recorded, the data in any given block cannot be altered retroactively without the alteration of all subsequent blocks, which requires collusion of the network majority.</p> <p>Blockchains are secure by design and are an example of a distributed computing system with high Byzantine fault tolerance. This makes blockchains potentially suitable for the sharing a variety of records to ensure traceability without any centralized control, and thus the technology may create a huge impact to our society worldwide.</p>
実習の概要・実施場所 Overview and location	<p>This FBL/PBL explores new social systems by using blockchain technologies. There already exists a variety of trials. We survey those activities and evaluate their potentials. We then try to create several new applications for future societies. For example, we can design a new documentation sharing system to create customized teaching materials, which can fit to any educational environment; teachers can freely use existing materials with reasonable costs, while keeping the compatibility with existing copyright systems.</p> <p>The FBL/PBL includes literature reviews, brainstorming / ideation workshops, invited talks, and presentations. See <i>Schedule</i> to know the location of the FBL/PBL.</p>
実施言語 Language	Both English and Japanese.
募集人数 / Number of participants	At least 2, at most 10.
応募資格 Intended participants	Graduate students of Kyoto University. If the number of applicants is more than 10, the higher priority will go to students of Dept. Social Informatics and/or Kyoto University Design School.
応募方法 How to apply	Send e-mail to ishida@i.kyoto-u.ac.jp and coordinator@ai.soc.i.kyoto-u.ac.jp by the end of April. The notification is due on May 11.
関連するデザイン理論/手法とその学習方法 Design theories and methods for framing and solving problems	<p>Domain (Informatics) design theory/methods are related to the classes including <i>Information Society</i>, <i>Information System Design</i> and <i>Information System Analysis</i>. Professional knowledge about distributed systems / cryptography is not mandatory. General design theory/methods includes facilitation and ideation methods, which will be introduced in this FBL/PBL.</p> <p>The blockchain related books and articles / papers will be provided at the first class.</p>
成績評価および成果の公開方法 Evaluation and publication	<p>Active participation (40%), an intermediated presentation (30%), and a final presentation (30%).</p> <p>The result of the final presentation (slides) will be published at the web site of the Department / Design School.</p>

実施計画 / Schedule

(テーマ提案時に詳細な内容が未定の場合は、記載不要。「実習の概要」に記載)

コマ Unit	日程 Date	場所 Location	実施内容 Content
1	May 18 Fri	Lounge 4F, Building 7th	<i>Introduction</i> (1 unit: 16:30-18:00, May 18).
3	June 1 Fri	Lounge 4F, Building 7th	<i>Literature Review</i> Group work (2 units: flexible, June 1 or before) and a meeting with faculty members (1 unit: 16:30-18:30, June 1).
3	June 8 Fri	Lounge 4F, Building 7th	<i>Literature Review</i> Group work (2 units: flexible, June 8 or before) and an intermediate presentation by each student (by slides) to limited audiences (1 unit: 16:30-18:30, June 7).
3	June 15 Fri	Lounge 4F, Building 7th	<i>Brainstorming / Ideation Workshop</i> Group work (2 units: flexible, June 15 or before) and a meeting with faculty members (1 unit: 16:30-18:30, June 15). An invited talk will be arranged from 16:30 to 18:00 on June 15 or 22.
3	June 22 Fri	Lounge 4F, Building 7th	<i>Brainstorming / Ideation Workshop</i> Group work (2 units: flexible, June 22 or before) and a meeting with faculty members (1 unit: 16:30-18:30, June 22). An invited talk will be arranged on June 15 or 22, from 16:30 to 18:00.
2	TBD by Department of Social Informatics	TBD by Department of Social Informatics	<i>Presentation</i> A preparation (1 unit: flexible) and an official final group presentation (slides) open to students / faculty members of Department of Social Informatics (1 unit: to be determined by Department of Social Informatics).