

Date: May 23rd. (Thu.) 2013

Time: 16 : 00-17 : 30

Venue: Tokyo Tech. Ookayama Campus, Midorigaoka-5 bldg., 1F, Meeting Room

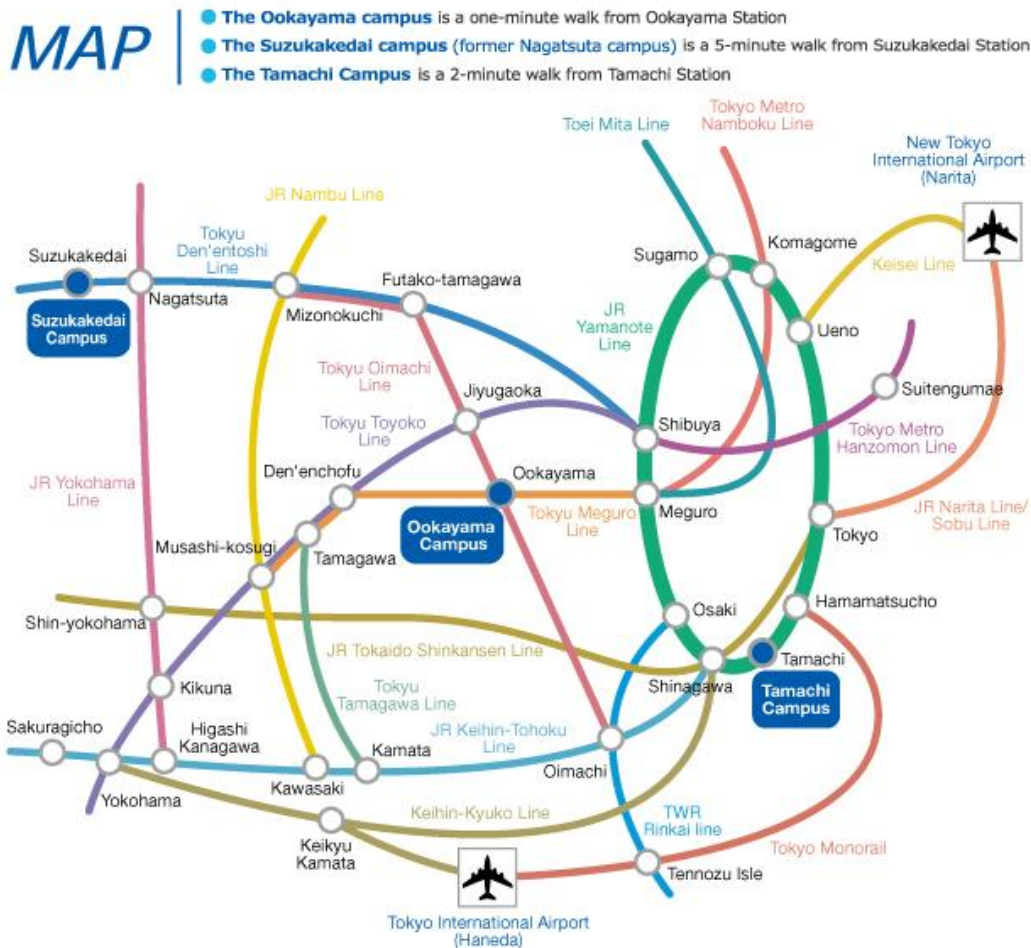
(東工大・大岡山キャンパス 緑が丘5号館(創造プロジェクト館) 1F 会議室)

<http://www.plan.cv.titech.ac.jp/fukudalab/contact/>

*Prior expression of interest to Assoc. Prof. Fukuda by email would be appreciated.

Programme :

16 : 00-17 : 30 Dr. Panagiotis Angeloudis (Lecturer at Imperial College London,
 Director of the Port Operations Research and Technology Centre)
 Managing the Relocation Problem in Bike-Sharing Systems
 (自転車シェアシステムにおける再配置問題：ロンドンを例に)



Managing the Repositioning Problem in Bike-Sharing Systems

(自転車シェアシステムにおける再配置問題：ロンドン为例に)

Dr. Panagiotis Angeloudis (Lecturer at Imperial College London,
Director of the Port Operations Research and Technology Centre)

Abstract

The presence of enough bicycles and free docking points to satisfy user demands in stations is a known operational issue in bicycle-sharing schemes. Empty and full stations in such systems are equally undesirable and disruptive for the operation of the network, since the former turn away potential users while the latter could not be used to terminate bicycle journeys. Repositioning practices have been used in the past to address this situation with partial success. This study introduces a new planning approach for such activities, addressing both routing and assignment aspects of bicycle repositioning using a fleet of carrier vehicles. A case study on bicycle usage patterns from a large bicycle-sharing scheme is carried out; examples are also provided that demonstrate the behaviour of the algorithm. Implementation concerns and means to improve computational performance are also discussed.

Note

Towards the end of the seminar (or privately), Dr. Panageotis could also talk about some of his ongoing work on infrastructure resilience.



11th TSU (Transport Studies Unit) Seminar

Managing the Repositioning Problem in Bike-Sharing Systems

(The 2nd International Seminar of Committee of Infrastructure Planning and Management, JSCE in FY2013)

Date: May 23rd . (Thu.) 2013

Time: 16 : 00-17 : 30

Venue: Tokyo Tech. Ookayama Campus, Midorigaoka-5 bldg., 1F, Meeting Room

(東工大・大岡山キャンパス 緑が丘5号館(創造プロジェクト館) 1F 会議室)

<http://www.plan.cv.titech.ac.jp/fukudalab/contact/>

*Prior expression of interest to Assoc. Prof. Fukuda by email would be appreciated.