

**Jae Ho Chung, Ph.D., LEED AP BD+C**  
Assistant Professor, Civil Engineering, Saint Martin's University

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## **EDUCATION**

Ph.D. in Civil Engineering, Construction Engineering and Management August 2015  
**University of Florida**, Gainesville, FL, USA

\* Dissertation: Optimizing Financial Structure of Transportation Public-Private Partnership  
Infrastructure Projects Based on Traffic Revenue Risks: Case Study of US DBFOM Project

\* Committee: Ralph Ellis (Chair), Charles Glagola, David Prevatt, Stanislav Uryasev

M.S. in Civil Engineering, Construction Engineering and Management May 2010  
**Columbia University**, New York, NY, USA

B.E. in Architectural Engineering February 2005  
**Kwangwoon University**, Seoul, South Korea

## **TEACHING INTEREST**

- Construction Engineering
- Construction Scheduling
- Cost Estimating
- Infrastructure Delivery Method
- Engineering Management
- Engineering Economics
- Engineering Sustainability

## **RESEARCH INTEREST**

- Infrastructure project delivery and alternative delivery (Public-Private Partnerships)
- Asset management in long-term infrastructure projects
- Civil infrastructure life-cycle risk assessment
- Engineering optimization
- Construction Economics
- Feasibility study and decision making in civil infrastructure project
- International Construction Project Management
- Sustainable Infrastructure Development

## **RESEARCH EXPERIENCE**

### **Doctoral Researcher**

Civil Engineering, University of Florida

*Optimizing Financial Structure of Transportation Public-Private Partnership Infrastructure Projects*

*Based on Traffic Revenue Risks: Case Study of US DBFOM Project (September 2013- August 2015)*

- Developed multi-objective optimization tools for revenue generating transportation PPP projects for lender and investor based on traffic revenue risks
- Optimized equity investment for concessionaire based on traffic revenue forecasting from historical data by using time series methods
- Identified infrastructure investment patterns included TIFIA, PABs, and equity
- Toll Price Sensitivity Analysis

*Critical Success Factors in Public-Private Partnerships in Transportation Infrastructure Projects*

*(September 2012- August 2013)*

- Identified Critical Success Factors for improved infrastructure development strategies for future PPP implementation
- Found the three most critical success factors based on 36 critical success factor by survey which responses from academia, State DOT, financier, lawyer, politician, construction engineer, concessionaire and project manager

## **TEACHING EXPERIENCE**

### **Assistant Professor**

August 2016 - present

Civil Engineering, Saint Martin's University

- Courses for Fall 2016 include
  - GE359: Professional Ethics, Legal Issues and Application
  - MEM610: Systems Engineering Management- Planning
  - MEM612 / MCE612 : Project Management

### **Teaching Assistant**

August 2011 – June 2016

Civil Engineering, University of Florida

- Prepared and delivered lectures, quizzes, and exams
- Created homework solutions, held weekly office hours
- Undergraduate Courses
  - CCE4204: Construction Method and Management (Fall 2011, Spring 2012)
  - CGN4010: Civil Engineering Cost Analysis (Fall 2012)
- Graduate Courses
  - CGN6905: Advanced Engineering Cost Estimating (Summer 2014, Summer 2015)
  - CGN6155: Construction Engineering 1 & 2 (Spring 2014, Fall 2014)
  - CGN6905: Civil Engineering Operation (Spring 2015)
  - CGN6905: Civil Engineering System (Spring 2013)
  - CGN6150: Engineering Project Management (Summer 2014, Summer 2015)
  - CGN6905: International Construction Engineering (Fall 2012, Fall 2013)
  - CGN6905: Sustainability of Civil Infrastructure (Spring 2013)

### **Academic Tutor**

Summer 2014

University Athletic Association, University of Florida

- Personal tutoring football player
- CGN6150: Engineering Project Management

### **Lecturer**

Spring 2011

Architectural Engineering, University of Suwon, Suwon, South Korea

- Building Material Science (68 Sophomores)

Civil Engineering, Joongbu University, Keumsan, S. Korea

- Geo-technical Engineering (49 Juniors)

Architectural Engineering, Dongseo University, Busan, S.Korea

- Construction Engineering and Management (32 Seniors)

## **NON-ACADEMIC EXPERIENCE**

**Scheduling Officer** (1<sup>st</sup> Lieutenant), Korea Army

March 2006- June 2007

- Planned, scheduled, and managed battalion manpower (400 soldiers), equipment, and projects
- Controlled and monitored project status, prepared project control and forecasting report

**Land Surveying Team Leader** (2<sup>nd</sup> Lieutenant), Korea Army

March 2005- February 2006

- Conducted land surveying, construction sites surveying, and as-built facilities surveying
- Managed and renewed military map and transferred to G.I.S.

## **PUBLICATIONS**

1. **Chung, J.**, Agdas, D., & Ellis, R. (2016). "Critical success factors in public-private partnerships in US transportation projects." Australasian Journal of Construction Economics and Buildings (Submitted)

2. **Chung, J.** & Agdas, D. (2016). "Optimizing financial structure of transportation public-private partnership infrastructure projects based on traffic revenue risks: A case study of the US DBFOM projects." (In progress).

## **HONORS & AWARDS**

LEED AP BD+C (Credential ID: 11069223-AP-BD+C)

Graduate Assistantship, University of Florida, 2011-2015

University Scholarship with the highest GPA achievement, Kwangwoon University, 2002-2004