

Etienne BURDET

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EDUCATION

UNIVERSITÉ PARIS-EST

Phd in Urban Engineering
 Expected Jan 2015 | EIVP, FR

MSc. in Urban Engineering
 Sustainable Urban Development
 Sept 2011 | UMLV, FR

ÉCOLE NORMALE SUPÉRIEURE DE CACHAN

Civil Engineering
 Graduated Sept 2011 | ENSC, FR

Agrégation - Civil Engineering
 ranked 9th, 2010 | ENSC, FR

SCIENCE MANAGEMENT

INTERNSHIP SUPERVISOR

Msc - Architecture
 Study of energy in vernacular and modern morphologies in Morocco.
 Undergraduate - Physics
 Multi-modal block scale modeling with hydrodynamic models.

SEMINAR

Organized 20 sessions, including international invited speakers.

SKILLS

PROGRAMMING

Commonly used :
 Matlab/Octave • Mapple •
 XQuery/XML • \LaTeX
 Familiar :
 C++ • HTML/CSS

SOFTWARE

Specialized :
 CitySim (trained at EPFL) • Rhino •
 Cast3m • FEAP
 General :
 Adobe Illustrator • Freeplane • Git

LANGUAGES

French : native
 English : fluent (965 TOEIC,
 conferences, papers, teamwork)

RESEARCH

ENGINEERING SCHOOL OF THE CITY OF PARIS

Phd (dir. Y.Diab) | Oct 2011 – Present | Paris, FR

Modeling of urban energy fluxes for urban design. I developed (theory and software) an integrated model of canopy, building energy and radiosity. Part of the SERVEAU project, a professional software for all energy consumptions (building, district, mobility and life cycle) in urban planning, designed with stakeholders, planners and engineering firms.

URBAN MORPHOLOGY LAB, CSTB

Msc (dir. S.Salat) | Feb - Sep 2011 | Paris, FR

Mathematical taxonomy of urban fabrics. I organized as many architectural and urban typologies as possible into a more general, mathematically based, framework.

UNIVERSITY OF COLORADO BOULDER

Intern (dir. V.Saouma) | April - Sep 2009 | Boulder, CO

Hybrid simulation of reinforced concrete beams under seismic loads. Help in coding, software testing, experiment setting and results analysis, in a large team.

TEACHING

Lecture (Master)

Dense cities and energy.

Studios & lab (Undergraduate)

Thermal analysis, Paris factor 4, Environmental impact assessment, Structural analysis, Architectural acoustics.

PUBLICATIONS

- E. Burdet, M. Colombert, D. Morand, and Y. Diab, "Integrated canopy, building energy and radiosity model for 3D urban design," *Energy and Buildings*, 2014 (submitted).
- E. Burdet, "Modelling of Energy Fluxes for Urban Designs," in *PLEA 2013 Sustainable Architecture for a Renewable Future*, (Munich), 2013.
- E. Burdet, M. Colombert, D. Morand, and Y. Diab, "Methodology for the Life Cycle Energy Assessment of Urban Designs," in *EcoBalance*, (Yokohama, Japan), 2012.
- E. Burdet, M. Colombert, D. Morand, and Y. Diab, "Modélisation des Flux Énergétiques Urbains pour les Projets d'Aménagements," in *Proceedings of Futurs Urbains.*, 2013.
- E. Burdet, *Taxinomie des Tissus Urbains*. Master's thesis (on request, unpublished), Université Paris-est Marne la Vallée, 2011.
- E. Burdet, M. Colombert, D. Morand, and Y. Diab, "Modèle multicouche couplé Bâti - Canopée urbaine," in *30 ème rencontres de l'Association Universitaire de Génie Civil*, (Cachan, France), 2013.