Biographical Sketches

HUIMING YIN (ASSOCIATE PROFESSOR), PhD, PE

Department of Civil Engineering and Engineering Mechanics

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(a) Professional Preparation

Hohai University, Nanjing, China Engineering Mechanics B.S.E. 1995
Peking University, Beijing, China Solid Mechanics M.S. 1998
The University of Iowa, Iowa City, IA Civil Engineering Ph.D. 2004
University of Illinois at Urbana-Champaign, IL Civil Engineering Materials PostDoc 2004-2006

(b) Appointments

Associate Professor, January 2013 – Present

Department of Civil Engineering and Engineering Mechanics, Columbia University

Assistant Professor, July 2008 – December 2012

Department of Civil Engineering and Engineering Mechanics, Columbia University

Civil Engineer, October 2006 – July 2008

Materials Engineering and Testing Services, California Department of Transportation

(c) Publications

Five Most Closely Related Publications (Advisees of Dr. Yin are highlighted by bold font)

- 1. **L. Wang, F.L. Chen,** H.M. Yin, 2017, Mechanics-based acceleration modelling of multilane traffic flow, *Transportation Research Record*, 96th Annual Meeting January 8-12, DC.
- 2. **L. Wang**, **F.L. Chen**, H.M. Yin, 2016, Detecting and tracking vehicles in traffic by unmanned aerial vehicles, *Automation in Construction*, 72, 294-308.
- 3. **L.Q. Yang**, H.M. Yin, 2014, Dissipative particle dynamics simulation towards single particle sedimentation. *Physical Review E*, 90, 033313.
- 4. H.M. Yin, **L. Wang, P. Maurin**, H. Xu, 2013, Dynamic transit service through the open mode integrated transportation system. *Transportation Research Record 92th Annual Meeting*, January 13-17, DC.
- 5. H.M. Yin, **A.M. Saleh,** M.D. Shields, 2011, Design and payoff prediction for the open mode integrated transit system. *Transportation Research Record* 90th Annual Meeting, January 23-27, DC.

Five Other Significant Publications

- 1. **S.Y. Zhu, F.L. Chen**, H.M. Yin, Simulation and Validation of Asphalt Foaming Process for Virtual Experiments and Optimization of WMA Production, *Journal of the Association of Asphalt Paving Technologists*, March 19-22, 2017 in Newport Beach, CA.
- 2. H.M. Yin, Y. T. Zhao, The Introduction to Micromechanics of Composite Materials, CRC Press and Spon Press, 2016.

- 3. **Y.J. Liu**, **G. Song**, H.M. Yin, Boundary effect on the elastic field and effective elasticity of a semi-infinite solid containing particles. *Proceedings of the Royal Society A*, 471(2179), 2015.
- 4. **S.-H. Jang**, H.M. Yin, Effect of aligned ferromagnetic particles on strain sensitivity of multiwalled carbon nanotube (MWCNT)/polydimethylsiloxane (PDMS) sensors, *Applied Physics Letters*, 106(14), 141903, 2015.
- 5. H.M. Yin, **P.-H. Lee**, **Y.J. Liu**, Equivalent inclusion method for the Stokes flow of drops moving in a viscous fluid. *Journal of Applied Mechanics*, 81, 071010, 2014.

(d) Synergistic Activities

- Instructor and host for high school students on STEM related programs in Harlem and local communities and several REU and RET programs
- Previous Committee Chair of ASCE Modeling Inelasticity & Multiscale Behavior Committee and Committee members for several professional committees
- Reviewer, associate editor, symposium organizer for +30 journals and conferences
- Founder of the Sustainable Engineering and Materials Laboratory & Columbia Site Director of Center for Energy Harvesting Materials and Systems
- Research proposal and panel reviewer for NSF CMMI, NSF Career, Caltrans, and TRB