Curriculum vitae Jaap Nienhuis

Name	Jacob Harm (Jaap) Nienhuis	Email	jhn@mit.edu
City	Cambridge, MA, USA	Date of birth	May 12, 1988
Phone	+1 774-521-8097	Nationality	Dutch

Education

PhD Oceanography, ***Massachusetts Institute of Technology / WHOI*** *(USA)*, 2015 (expected)
Concentrations: River mouths / Coastal Morphodynamics

MSc Civil Engineering (*cum laude*), ***University of Twente*** *(NL)*, 2011
Concentrations: Hydro/Morphodynamics, Hydraulic engineering, Flow networks
Thesis: Modeling deltaic response to changes in fluvial sediment delivery, grade: 8/10

BSc Civil Engineering, ***University of Twente*** *(NL)*, 2009
Minor/pre-master: Mathematical analysis, Stochastic operations research
Thesis: The usage of Cooperative/Adaptive Cruise Control, grade: 9/10

Professional experience

2012 [sep- ***Massachusetts Institute of Technology*** (USA); Graduate research assistant

2012 [mar–aug] ***Woods Hole Oceanographic Institution*** *(USA)*; Guest Investigator
Researching behaviour of river deltas experiencing changes in fluvial sediment supply

2011 [nov–apr] ***Royal Haskoning*** *(NL)*; DTS analyst
Developing algorithms to automate error checking in urban drainage networks with distributed temperature sensing.

2011 [feb-jul] ***Woods Hole Oceanographic Institution*** *(USA)*; Guest Student
Modelling deltaic shoreline development, resulting in my MSc thesis.

2011 – 2008 ***University of Twente*** *(NL)*; Teaching assistant
Courses: Finance & Accounting, Cost Management Engineering and Advanced Modelling. I arranged and taught classes, graded examinations and provided feedback on submitted work.

2009 [apr-aug] ***University of California, Berkeley*** *(USA)*; Visiting Research Scholar
Researching transportation networks, resulting in my BSc thesis

2005 [nov-apr] ***University of Groningen*** *(NL);* High school student
Analyzing raw LOFAR telescope data at the Kapteyn Astronomical Institute

Additional experiences

2012 – 2006	Scouting; scout leader of children between 7 and 11
	Within a team, we organized weekly activities and camps for around 25 children.
2012	Summer School, National Centre for Earth Surface Dynamics; Minneapolis
	Awarded participation in the 2-week summer institute of earth surface dynamics
2012	Presentation at the Dutch centre for coastal research (NCK)
2011 – 2008	Professional photographer, giving workshops in photography, exhibiting own work
2010	Dutch Nomination at the International Meuse Symposium in Liege, BE
	We won a Dutch nomination to the symposium with our water management solution.
2010	Nominated for the Royal Institution for Engineers/University of Twente thesis prize
	The Civil Engineering department nominated me for this university-wide prize
2010 – 2008	Photography association; treasurer, organising trips/activities
	For the photography association, I was member of the board for 2 years. I arranged the expositions, the finances and various activities.
2008 – 2007	Sport association; chairman of the ISSTT committee
	With the committee we put together Europe's second-largest floorball tournament (450 participants).
2005 – 2004	High school activities association; member of the board
	I was treasurer for the Rhetorica. We organized festivals, sporting events and parties.

Additional experiences

Languages	Dutch (native), English, German
Professional	Programming (C/MatLab), graphic design, data analysis
Sports	Floorball, squash, swimming, yoga
Hobbies	Piano, photography

Papers

Nienhuis, J. H., A. D. Ashton, P. C. Roos, S. J. M. H. Hulscher, Giosan, L. (*in review*) Wave reworking of abandoned deltas

Vosse, M., Schilperoort, R., Haan, C. de, Nienhuis, J.H., Tirion, M., Langeveld, J.G. (2012) Processing of DTS monitoring results: automated detection of illicit connections. IWC Conference, Amsterdam, NL

Nienhuis, J. H., Haan, C. de, Langeveld, J. G., Klootwijk, M., Clemens, F. H. L. R. (*2012*) Assessment of detection limits of fiber-optic distributed temperature sensing for detection of illicit connections, Urban Drainage Modelling, Belgrade, Serbia

Ashton, A.D, Hutton, E.W., Kettner, A.J., Xing, F., Kallumadikal, J., Nienhuis, J.H., Giosan, L. (2012) Progress in Coupling Models of Coastline and Fluvial Dynamics, Computers & Geosciences

Nienhuis, J. H., A. D. Ashton, P. C. Roos, S. J. M. H. Hulscher, Giosan, L. (2012), Modeling deltaic response to changes in fluvial sediment delivery, NCK days, Netherlands center for coastal research, Enschede, Netherlands.

Nienhuis, J.H. (2011), Modeling deltaic response to changes in fluvial sediment delivery. MSc-Thesis. http://essay.utwente.nl/61060/

Nienhuis, J. H. (2011), Deltaic response to fluvial sediment elimination, in *Conceptueel*, ConcepT. http://www.concept.utwente.nl/files/ConcepTueel/ConcepTueel_20-4_webversie.pdf

Shladover, S. E., X. Y. Lu, D. Cody, C. Nowakowski, T. Z. Qiu, A. Chow, J. O'Connell, J. H. Nienhuis, and D. Su (2010), Development and Evaluation of Selected Mobility Applications for VII, in *UCB-ITS-PRR-2010-25*, PATH, UC Berkeley, Berkeley.

Abstracts

Nienhuis, J.H., Ashton, A.D., Giosan, L. (2013) Using numerical models to constrain the evolution of the Ebro Delta. RCEM, Santander, ES

Ashton, A.D., Nienhuis, J.H. (2012) On the hook of a Spit. AGU Fall Meeting, San Francisco, CA

Nienhuis, J.H., Ashton, A.D., Giosan, L. (2012) Quantifying the transition from fluvial- to wave-dominance for river deltas with multiple active channels. AGU Fall Meeting, San Francisco, CA

Hogeboom, H. J., M. Siemerink, F. v. d. Werf, A. Zeekant, T. Doldersum, and J. H. Nienhuis (2010), 'Ritsen met water' How to manage the Meuse, International Meuse Conference, Liege, BE. www.routine-nijmegen.nl/IMCjunior/abstract/University_of_Twente.pdf