

# Mathias J. Craig

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## Education

- M.S., Environmental Engineering (Information Technology emphasis), June 2003, *Massachusetts Institute of Technology*
- B.S., Environmental Engineering, May 2001, *University of California - Berkeley*

## Work Experience

- June 03' – Present: Co-Founder, Executive Director and Chairman, blueEnergy
  - ✦ Conceived of and co-founded international nonprofit corporation that builds local capacity in underserved communities to manufacture, operate and maintain renewable energy systems; provide organizational leadership; establish strategic partnerships; develop budget; lead fundraising initiatives.
- June 02' – June 03': Research Fellow, Draper Laboratory
  - ✦ Conducted research on autonomous software agent systems; developed a framework for autonomous distributed operations of joint software / hardware collaboration teams.
- September 01' – June 02': Graduate Research Assistant, Massachusetts Institute of Technology
  - ✦ Conducted research on distributed software workspaces; developed and programmed a simulation system for distributed teams working on disaster relief search and rescue operations.
- August 00' – January 01': Research Associate, Lawrence Berkeley National Laboratory
  - ✦ Analyzed measurements of tracer gas from field tests of gas penetration into buildings; kept a detailed notebook of the measurements and also conducted extensive data analysis on the results using spreadsheets.
- June 99' – August 00': Student Research Assistant, Lawrence Berkeley National Laboratory
  - ✦ Designed and built many components of a tracer gas release system for indoor airflow experiments; setup the indoor experiment building; installed a 60-beam infrared laser system for gas concentration measurements; conducted extensive data analysis on the experiment results.
- June 98' – August 98': Science Intern, Environmental Law Alliance Worldwide
  - ✦ Empowered environmental lawyers in developing countries by providing them with scientific information that they themselves could not obtain firsthand.

## Awards

- Energy Globe Award: National Winner for Nicaragua and Finalist for Energy Globe World Award, 2008
- Tech Museum Award Laureate, winner in Economic Development Category, 2007
- CNN Hero, CNN Heroes Viewers' Choice Finalist, 2007
- Charles Stark Draper Laboratory Fellowship, 2002-2003
- MIT \$1k Entrepreneurship Competition, Global Markets Category, 2002
- Schoettler Fellowship, 2001
- Lawrence Berkeley National Laboratory \$1k Spot Recognition Award, 1999

## Software / Computer Systems Proficiency

- PC & MAC Operating Systems, Microsoft Office Suite, Visio, OmniGraffle, Salesforce.com, Java, MySQL, Oracle8i, Adobe GoLive, HTML, XML

## Languages

- English: Native
- French: Read, write, and speak fluently
- Spanish: Proficient in reading, writing, and speaking

## Conference Presentations

- Craig, M., "Locally Manufactured Hybrid Renewable Energy Systems: A Vision for Energy Sustainability on the Caribbean Coast of Nicaragua and Beyond", *Forum: First Meeting of the European Union and Latin America on Renewable Energy*, Energy and Environment Partnership with Central America (EEP), Panama City, Panama, October 2006.

- Craig, M., Marandin, L., Craig, G., Castillo, I., McCrae, P., “Building Local Capacity for Sustainable Wind Power Development on the Caribbean Coast of Nicaragua”, *Fourth Regional Forum: Wind Power in Central America*, Energy and Environment Partnership with Central America (EEP), San Jose, Costa Rica, October 2004.

## **Publications**

- Craig, M., Marandin, L., Craig, G., Castillo, I., “Local People, Materials and Energy: A Joint Effort By Local and International Actors to Develop a Local, Low-Cost and Sustainable Solution to the Energy Needs of the Indigenous and Afro-descendent peoples of the Caribbean Coast of Nicaragua”, Appearing in summary form in the Human Development Report 2005: Autonomous Regions of the Caribbean Coast - Is Nicaragua Assuming its Diversity?, United Nations Development Programme, Pg. 125-126, 2005. (Article and publication in Spanish)
- Peña-Mora, F., Craig, M., “AVSAR: A Collaboration System for Disaster Search and Rescue Operations Using Autonomous Vehicles,” Accepted for publication in the International Journal of IT in Architecture, Engineering and Construction (IT-AEC), December 2003.
- Craig, M., “A Design For Dynamic Self-Organization in Autonomous Distributed Operations”, Master of Science Thesis: Massachusetts Institute of Technology, The Charles Stark Draper Laboratory, Inc., CSDL-T-1450, May 2003.
- Fischer, M. L., Price, P. N., Thatcher, T. L., Schwalbe, C. A., Craig, M. J., Wood, E. E., Sextro, R. G., Gadgil, A. J., “Rapid Measurements and Mapping of Tracer Gas Concentrations in a Large Indoor Space”, *Atmospheric Environment*, Vol. 35, Pg 2837-2844, 2001.
- Gadgil, A. J., Finlayson, E. U., Fischer, M. L., Price, P. N., Thatcher, T. L., Craig, M., Hong, K. H., Housman, J., Schwalbe, C. A., Wilson D. J., Wood, E., and Sextro, R., "Investigating Dispersion of an Airborne Contaminant in a Large Space: Experiments and CFD Predictions", *Proceedings, RoomVent 2000, 7th International Conference on Air Distribution in Rooms*, 9-12 July 2000, University of Reading, UK. Pg. 613-618. LBNL-44790

- references available upon request -