

CHARLES ATENCIO

2 Carrington Way, Bradford, MA 01835 • (978) 973-3890
charles.atencio@sloan.mit.edu • <http://CharlesAtencio.com>

EDUCATION

- 2010 M.S. Engineering and Management, *Massachusetts of Technology*
- Thesis Topic: International Development, Business Strategy, and Technology
Academic Advisor: Dr. Nicholas Ashford, J.D., Department of Technology and Public Policy
- 2007 Certificate: Applied Project Management, *Boston University*
- 1999 B.S. Mechanical Engineering, *Worcester Polytechnic Institute*
- Major Qualifying Project Topic: Energy Analysis, Thermodynamics, and System Design
Academic Advisor: Dr. Brian Savilonis, Department of Mechanical Engineering
 - Interactive Qualifying Project Topic: Computer Innovation and Education
Academic Advisor: Dr. John Zeugner, Department of Humanities and Arts
 - Sufficiency Topic: Technology Development, History, and Military Strategy
Academic Advisor: Dr. James Watters, USN (Ret.), Department of Humanities and Arts

TEACHING AND ADVISING EXPERIENCE

- 2010 Teaching Assistant, MIT: ESD.54 – Engineering Leadership
- 2010 – 2011 Technical Instructor, MIT: ESD.34 – System Architecture
- 2010 Technical Instructor, MIT: ESD.74 – System Dynamics for Engineers
- 2009 – 2011 Mentor: MIT Bernard Gordon Engineering Leadership Program (MIT GEL)
- 2002 – 2008 Advisor to Junior Engineers and Engineering Interns at Various Consulting Engineering Firms
- 1995 – 1999 Tutor, Worcester Polytechnic Institute: Calculus, Physics, Fluid Mechanics, and Heat Transfer
- 1992 – 1995 Tutor, Central Catholic High School: Algebra, Geometry, Trigonometry, Calculus, and Physics

PUBLICATIONS

- 2012 “Robust Decision Engineering: Collaborative Big Data and its Application to International Development/Aid” — *International Workshop on Collaborative Big Data, Institute of Electrical and Electronics Engineers (IEEE)*
- 2011 “Humans as Sensors: The Next Generation of Geospatial Technology Applications to Anticipate and Mitigate Climate Conflict” — *African Centre for the Constructive Resolution of Disputes (ACCORD)*
- 2010 “The Impact and Potential Role of Multinational Corporations in Achieving Sustainability in Latin American Countries” — *MIT School of Engineering and MIT Sloan School of Management*
- 1998 “Higgins Labs HVAC Design” — *Worcester Polytechnic Institute, Department of Mechanical Engineering*
- 1998 “Computer Integrated Success for All” — *Worcester Polytechnic Institute, Interdisciplinary and Global Studies Division*
- 1997 “Anti-submarine Warfare in the North Atlantic” — *Worcester Polytechnic Institute, Department of Humanities and Arts*

SCHOLARLY RESEARCH

Northeastern University

- 2014 Analysis of Canadian Arctic Civil-Military Activity and Geopolitical Strategy — *Dr. Philip D'Agati, Associate Professor, Northeastern University Department of Political Science*

Massachusetts Institute of Technology

- 2011 “The Role of Customer Experience in Technology Strategy: Implications for Product Adoption in Information Technology” — *MIT System Design and Management*
- 2011 “System Dynamics Models for Social Media Behavior” — *MIT Geospatial Data Center*
- 2011 “The Genome of Social - A Systems-Theoretic Study of Social Media” — *MIT Geospatial Data Center*
- 2010 “An Analysis of Cloud Computing as a Disruptive Technology” — *MIT Sloan School of Management*
- 2010 “TD Bank Financial Group: Online Channel Strategy” — *Harvard Business School / MIT Sloan School of Management*
- 2010 “An Analysis of the Poverty Footprint – A Workshop with Oxfam America and Oxfam International” — *MIT Sloan School of Management and Oxfam America*
- 2009 “Open Source Project Management of Fedora Software Development” — *MIT Sloan School of Management*
- 2009 “Somali High Seas Piracy Resolution: An Application of Systems Engineering to International Policy” — *MIT Engineering Systems Division*
- 2009 “Strategic Analysis and Recommendations of Technologies for Green IT Management of Data Centers” — *MIT Sloan School of Management*
- 2009 “Cloud Computing Technology Development, Applications, and Business Strategy.” — *MIT Sloan School of Management*

PROFESSIONAL RESEARCH

Prince of Wales Fellowship at MIT

- 2012 Proposal: Afghanistan Counter Narcotics Program — *U.S. Department of State*
- 2012 “Big Data to Big Insight Decision Engineering: The Art and Science of Human Domain Analysis for Infusing Latent Stability Amidst Dorian Gray Duality” — *Human Domain Analysis Conference, The University of North Carolina and U.S. Army Special Operations Command, Fayetteville, NC*
- 2012 “Evolutionary Decision Engineering and the Art and Science of Winning and Unfair Cyber Game: Dorian Gray Detection” — *Bridging and Gap: Silicon Valley and The Beltway, U.S. Department of Defense and Security Innovation Network (SINET)*
- 2012 Economic and Political Causes of Colonial Insurgency in the American Revolutionary War
- 2012 The Development and Growth of Afghan “Green-on-Blue” Insider Threats Against International Security Assistance Force (ISAF) Personnel
- 2012 Influence of the Haqqani Network Over Al Qaeda Operations in Afghanistan and Pakistan
- 2012 Real-Time Sensemaking Systems for Management of Security and Humanitarian Crises
- 2012 Proposal: Consortium for Integrated Data Analysis — *U.S. Agency for International Development (USAID)*
- 2012 Use of International Development and Civil Affairs Data to Identify and Perturb Insurgent Networks
- 2011 “The Chinese Gilded Age: China’s Relentless Pursuit for the Technological Raw Material Treasures of the 21st Century and their Faustian Bargain with Africa”
- 2011 Pakistani Fertilizer Supply Chains and the Use of Improvised Explosive Devices (IEDs) in Afghanistan
- 2011 Chinese Diesel Fuel Threat Financing in Trans-Saharan Africa

Engineering Projects

- 2011 “Massachusetts Green High Performance Computing Center: Energy Model and Power Usage Effectiveness Report” — *M+W Group*
- 2006 “Amgen Pharmaceuticals: Phase IV Lab Building Project, Program, and Portfolio Report” — *RDK Engineers*

PROFESSIONAL ACTIVITY

Military Service

1995 – 1997 U.S. Navy Reserve Officers Training Corps: College of the Holy Cross, Worcester, MA

Consulting and Freelance

2014 – Present Campaign Field Coordinator: Committee to Elect Diana DiZoglio, Methuen, MA
 2014 – Present Director of Social Media: Committee to Elect Oscar Camargo, North Andover, MA
 2011 – Present Program Manager: Prince of Wales Fellowship at MIT, Cambridge, MA
 2013 – 2014 Capital Project Manager: Lantheus Medical Imaging, Billerica, MA
 2011 – 2013 Security and Defense Researcher: Prince of Wales Fellowship at MIT, Cambridge, MA
 2011 Chief of Staff: Humanitarian Assistance Disaster Relief Centre (HADR)
 2011 Energy Engineer: M+W, U.S., Albany, NY
 2011 Social Media Advisor: MIT Geospatial Data Center, Cambridge, MA
 2010 – Present Developer: Networked H.264 MPEG4 Video Archive
 2009 – 2010 Organizational Change Advisor: Oxfam America, Boston, MA
 2007 – 2009 Project Engineer: AHA Consulting Engineers, Lexington, MA
 2005 – Present Developer: Online HDTV Media Server
 2006 – 2007 Project Manager: Industrial Projects, RDK Engineers, Andover, MA
 2004 – 2006 Mechanical Design Engineer: Tyco / EarthTech, Concord, MA
 2002 – 2008 Videographer: Post-Production Editing and Authoring of Video DVDs
 2001 – Present Computer Network Administrator: Microsoft Windows and Apple OSX Systems
 1999 – 2004 Mechanical Engineer: Process Facilities / Parsons Engineering, Boston, MA
 1995 – Present System Administrator: Engineering Design and AutoCAD Workstation Suites
 1993 – 1995 Multimedia Videographer: Central Catholic Broadcasting, Lawrence, MA
 1990 – Present IT Technical Support Specialist and System Integrator: Windows, MS-DOS, and Macintosh

Speeches, Discussions, Colloquia, and Other

2013 Participant: MIT / U.S. Army Northeast Information Operations Center (NEIOC) Joint Cyber Competition Meeting, IBM Network Science Research Center, Cambridge, MA
 2013 Videographer: U.S. Army Northeast Information Operations Center (NEIOC) Cyber Security Training and Research Introduction
 2013 Co-Organizer: U.S. Army Northeast Information Operations Center (NEIOC) Cyber Security Workshop, IBM Network Science Research Center, Cambridge, MA
 2012 – 2013 Participant: MIT / U.S. Army Northeast Information Operations Center (NEIOC) Joint Cyber Security Exercises, Fort Devens, MA
 2012 Presenter: Prince of Wales Fellows and MIT Research Briefing to the Chairman of Swansea University's Network/Relationship Science Analytics Programme, IBM Network Science Research Center, Cambridge, MA
 2012 Observer: U.S. Army Special Operations Command Capability Exercise, Fort Bragg, NC
 2012 Participant: 1st Annual Minerva Project Workshop, U.S. Military Academy at West Point
 2012 Presenter: MIT International Development Night, Cambridge, MA
 2012 Advisor: Joint Improvised Explosive Device Defeat Organization, Counter-IED Operations/Intelligence Integration Center (JIEDDO COIC)
 2011 Participant: Meeting with Library of Congress Office of Information Management and Technology, Washington, DC
 2011 Presenter: Star-Tides (Transformative Innovation for Development and Emergency Support) Inmarsat Technology Demonstration, Fort McNair, Washington, DC
 2011 Co-Organizer: U.S. Army 95th Civil Affairs Brigade (Airborne) Workshop, Fort Bragg, NC

- 2011 Co-Organizer: Briefing to Commander of Joint Improvised Explosive Device Defeat Organization, Counter-IED Operations/Intelligence Integration Center (JIEDDO COIC)
- 2011 Attendee: 14th MIT Latin American Conference, Cambridge, MA
- 2011 Presenter: Geospatial Cyber-Physical Supply Chain Summit, Cardiff, Wales, UK
- 2011 Co-Organizer: IBM Watson Jeopardy Lecture, Cambridge, MA
- 2010 Attendee: MIT Systems Thinking Conference, Cambridge, MA
- 2010 Member: MIT SDM Industrial Relations Search Committee, Cambridge, MA
- 2010 Interview: “An MBA or an MIT Master’s in Engineering and Management?” — MIT System Design and Management Alumni Voices
- 2010 Attendee: Cloud Virtualization Conference and Expo, Santa Clara, CA
- 2010 Attendee: Cloud Virtualization Conference and Expo, New York, NY
- 2010 Student: “Executing Strategy,” Harvard Business School, Boston, MA
- 2010 Student: “Corporate Strategy,” Harvard Business School, Boston, MA
- 2009 – 2010 Co-Organizer: MIT Energy Conference, Boston, MA
- 2009 – 2010 Co-Organizer: MIT Energy Night, Cambridge, MA
- 2009 Presenter: MIT Systems Thinking Conference, Cambridge, MA
- 2009 Attendee: International Engineering Systems Symposium, Cambridge, MA
- 2008 Attendee: Corporate Headquarters and Manufacturing Tour, Loren Cook, Springfield, MO
- 2006 Attendee: Engineering Hydronic System Design and Control, Fluid Industrial Associates, Woburn, MA
- 2006 Attendee: Commissioning and TAB Seminar, Engineered Systems, Sturbridge, MA
- 2005 Attendee: Commercial Exhaust System Design, Exhausto, Boston, MA
- 2003 Attendee: Noise Control Engineering Seminar, Ventrol Air Handling Systems, Boston, MA
- 2000 Attendee: Northeast Buildings and Facilities Management Conference, Boston, MA
- 1999 Attendee: HVAC Advanced Design Seminar, Trane, Woburn, MA
- 1999 Attendee: Water System Design Seminar, American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), Waltham, MA
- 1996 Participant: U.S. Navy War College Cyprus War Game, Worcester, MA

Selected Projects

- 2010 – Present Developer: Networked High Definition MP4 H.264 Video iTunes Media Server
- 2014 IT System Integrator: Overclocked Windows 7 — 64-bit Gaming PC
- 2012 IT System Engineer: Linux-based Multimedia Terminal for Prince of Wales Fellows at MIT
- 2011 Energy Engineer: Massachusetts Green High Performance Computing Center, Holyoke, MA
- 2007 – 2010 Developer: Networked Web-Accessible TVersity Media Server
- 2008 System Integrator: Networked Video Capture, Encoding, and Storage PC System Suite
- 2008 Project Coordinator: MIT Life Science Research Center, Cambridge, MA
- 2007 Project Coordinator: IBM Mass Lab, Central Plant Upgrade, Littleton, MA
- 2006 – 2007 Project Manager: Amgen Kendall Square Research Laboratory Expansion, Cambridge, MA
- 2006 Energy Engineer: Bethesda Medical Center, Mechanical Energy Audit, Bethesda, MD
- 2005 Design Engineer: Donald W. Wyatt Federal Detention Facility, Central Falls, RI
- 2004 – 2005 Design Engineer and Estimator: City of Milford, CT, Water Treatment System Upgrade
- 2002 – 2003 Project Engineer: Nitto Denko Avecia Manufacturing Expansion, Milford, MA
- 2002 Energy Engineer: Associates of Cape Cod, Energy Audit, East Falmouth, MA
- 2001 Lead Engineer: Oncologic Filling Facility Expansion, Mayagüez, Puerto Rico
- 2000 – 2001 Design Engineer and Estimator: Sanofi Aventis, Chemical Pilot Plant, Bridgewater, NJ
- 1993 – 1999 IT Network Engineer: AutoCAD Software and Hardware Design Studio

COLLEGIATE SERVICE AND ACTIVITIES

Massachusetts Institute of Technology

2011 – 2012 Member: MIT International Development Initiative (MIT IDI)
 2011 Social Media Advisor: MIT Geospatial Data Center (MIT GDC)
 2010 – 2011 Chief Operating Officer: MIT Social Media Club
 2009 – 2011 Presenter: MIT System Design and Management (MIT SDM) Student Information Sessions
 2009 – 2011 Mentor: MIT SDM / MIT Bernard Gordon Engineering Leadership Program
 2009 – 2010 Co-Organizer: MIT Energy Conference
 2009 – 2010 Co-Organizer: MIT Energy Night
 2009 – 2010 Advisor: MIT SDM Industrial Relations Committee
 2009 Organizer: MIT SDM Gaming Night
 2009 Videographer: MIT SDM / Microsoft Business Trip

Worcester Polytechnic Institute

1997 – 1999 Tutor: Calculus, Physics, Fluid Mechanics, Thermodynamics, and Heat Transfer
 1995 – 1997 Midshipman: United States Naval Reserve Officers Training Corps (NROTC)

Central Catholic High School

1993 – 1995 Co-Organizer: Central Catholic Broadcasting (CCB)
 1993 – 1995 Member: Math League
 1992 – 1995 Tutor: Algebra, Geometry, Trigonometry, Calculus, and Physics

COMMUNITY SERVICE

Knights of Columbus

3rd Degree Knight
 Assistant Director of Public Relations and Community Outreach

St. Augustine's Parish

Art Committee Volunteer
 Bell Choir Member

Massachusetts Institute of Technology

Gordon Engineering Leadership Program (MIT GEL) Mentor
 MIT System Design and Management (MIT SDM) Alumni Advisor
 MIT SDM Travel Club Co-Organizer

Worcester Polytechnic Institute

Gordon Engineering Leadership Program (MIT GEL) Mentor
 MIT System Design and Management (MIT SDM) Alumni Advisor
 MIT SDM Travel Club Co-Organizer

Tewksbury State Hospital

Feature Film Exhibitor

Career Advisor

Resume Writer
 Linked-In Profile Developer

CERTIFICATIONS

Applied Project Management	Boston University
EIT (No. 18914)	Massachusetts Board of Professional Engineers and Land Surveyors
Secret Security Clearance — Inactive	ROTC (USN), College of the Holy Cross, Worcester, MA

LANGUAGES

English, Native Proficiency
Spanish, Fluent Proficiency

PERSONAL INTERESTS

International Affairs	History and Strategy
Systems Thinking	System Dynamics
Systems Engineering	Computer Technology
Documentary Films	Investigative Journalism
Strategy Gaming	Military Combat Simulations

PROFESSIONAL MEMBERSHIPS

System Dynamics Society	U.S. Naval Institute (USNI)
MIT Enterprise Forum	MIT Energy Club
International Council of System Engineers (INCOSE)	Society of Organizational Learning (SoL)
Institute of Electrical and Electronics Engineers (IEEE)	Investigative Journalism
Strategy Gaming	Military Combat Simulations

WEBSITES

Personal Website	http://CharlesAtencio.com
Blog	http://catencio-sdm2009.blogspot.com
Linked-In	http://www.linkedin.com/in/charlesatencio
Twitter	http://twitter.com/Charlie_MIT_SDM
Facebook	http://www.facebook.com/charles.atencio