

JONATHAN Y. HUANG

DOCTOR OF PHILOSOPHY CANDIDATE, INTERNATIONAL AFFAIRS, SCIENCE, AND TECHNOLOGY
SAM NUNN SCHOOL OF INTERNATIONAL AFFAIRS
GEORGIA INSTITUTE OF TECHNOLOGY

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EDUCATION

Georgia Institute of Technology – Atlanta, GA

August 2007 – Present

Doctor of Philosophy, International Affairs, Science, and Technology (expected December 2015)

- Ivan Allen College Dean's Fellowship; Tech to Teaching Certificate Levels A&B (NSF-funded program)
- Concentrations: International Relations Theory, International Security Policy, Cognitive Sciences (Minor)
- Dissertation: "Scientific Feasibility, Requirements Stringency, and Technology Alternatives: Explaining Military Investments in Emerging Technologies as a First-Mover"
- Committee: Margaret Kosal (Chair), Adam Stulberg, Katja Weber, Mariel Borowitz, and Robert Butera

Master of Science, International Affairs (May 2009)

- Concentrations: International Security and Policy, Comparative and Regional Studies

Emory University – Atlanta, GA

August 2001 – May 2005

Bachelor of Arts, Summa Cum Laude.

- Majors: International Studies and Economics/History; Minors: French Studies and Theater Studies
- Honors Thesis: "World War I and Liang Qichao's Reevaluation of Science, Progress, and Nationalism in the 1920s: A Comparative Textual Analysis of His Historical Thought" (Advisor: Elizabeth Fox-Genovese)

ACADEMIC EXPERIENCE

Georgia Institute of Technology – Atlanta, GA

Teaching Experience

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| ▪ Instructor, Introduction to International Relations (48 students) | Summer 2014 |
| ▪ Instructor, Wizards, Wookiees, and World Politics (30 students) | Spring 2012 |
| ▪ Instructor, Contemporary Security Issues (13 students) | Fall 2011 |
| ▪ Mentee Instructor, Great Power Relations (Professor K. Weber, 65 students) | Spring 2011 |

Other Academic Experience

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| ▪ Teaching Assistant, Science, Technology, and International Affairs (J. Bankoff) | Spring 2015 |
| ▪ Teaching Assistant, Science, Technology, and Human Values (H. Klein) | Fall 2014 |
| ▪ Research Assistant (M. Taylor) | Fall 2012 |
| ▪ Teaching Assistant Fellow, Center for the Enhancement of Teaching and Learning | Summer 2011 |
| ▪ Teaching Assistant, United States Foreign Policy (M. Salomone) | Summer 2010 |
| ▪ Teaching Assistant, Military Revolutions and 20 th Century Warfare (M. Salomone) | Summer 2010 |
| ▪ Research Assistant (M. Kosal) | Summer 2009 |
| ▪ Teaching Assistant, Political Philosophies and Ideologies (L. Graybill) | Spring 2008 |
| ▪ Teaching Assistant, International Political Economy (M. Taylor) | Spring 2008 |

Course Development

- Contemporary Security Issues: Lower-level undergraduate elective course. This class serves as a survey of contemporary issues in security studies for the undergraduate students. Course content includes international relations and security theories and specialized topics such as proliferation, terrorism, globalization and environment, migration, ethnic conflict, and state failure.
- Wizards, Wookiees, and World Politics: Undergraduate and graduate elective course. This class uses science fiction and fantasy literature and film to explain major concepts in the study of world politics. Course content includes foundations of international relation theory and discussion of concept such as power, order, nation-state, identity, culture, and norms.

PROFESSIONAL EXPERIENCE

The Hague Centre for Strategic Studies – The Hague, Netherlands

Research Associate (off-site)

October 2008 – October 2009

- Conducted foresight analysis on the developments and security implications of nanotechnology and biometrics
- Provided policy guidance based on the foresight analysis to customers in European security communities

The Southern Center for International Studies (SCIS) – Atlanta, GA

Assistant Development Coordinator

August 2006 – August 2007

- Managed grants with foreign foundations and grant agencies including ones from the European Commission, Taiwan, Korea, and Japan; advised the President of SCIS on prospective donors; wrote grant proposals and managed correspondences with donors and foundations; coordinated between departments (including programming, educational services, and research library) for funding needs and grant processes
- Served as the Chief Editor for the Center's quarterly newsletter; attended and reported on Center programs to members, donors, and sponsors; managed and supervised the publication process of the newsletter; coordinated departmental reports and activity updates

Intern, Marketing/Development

January 2006 – August 2006

- Identified donors; helped plan and document the annual corporate campaign
- Identified and reported on prospective users of the Center's educational product, *The World in Transition* series

Alliance Française of Atlanta – Atlanta, GA

Intern, Administration and Marketing

January 2006 – May 2006

- Performed administrative duties and marketing for the center's corporate training programs

The Carter Center – Atlanta, GA

Intern, China Village Election Project

August 2005 – December 2005

- Researched, analyzed, translated, and reported on local news pertaining to democratization in China
- Researched and translated Western works on democratization for the Center's partner in China

American Institute for Research – Atlanta, GA

June 2005 – December 2005

Translator

- As contracted translator, identified, translated, and reported on medicine and public health-related articles and publications in local Chinese-language new sources for the Institute's project on public health awareness and advocacy in local minority communities

RESEARCH INTERESTS

International relations theory, international security and policy, security implications of emerging technologies, military R&D investments, role of scientists in policymaking, human elements of war, ethics in international affairs, East Asian and European security issues

SCHOLARLY WORK

Peer-Reviewed Publications

"Security Implications and Governance of Cognitive Neuroscience Research: Results from an Ethnographic Survey of Researchers" (with Margaret Kosal), *Politics and the Life Sciences*, vol. 34, no. 1 (July 2015): 93-108.

"East Asian Security Revisited in Light of the European Experience" (with Katja Weber), *Issues and Studies*, vol. 46, no.1 (March 2010): 89-121.

Other Publications

Future Issue Economic Crises: Examining the Security Implications (with Michael Gold, George Boone, Stephan de Spiegeleire, Tim Sweijs), The Hague, Netherlands: The Hague Centre for Strategic Studies, October 2009.

Future Issue Biometric: The Uncertainty of Identification & Authentication: 2010-2020 (with George Boone, Stephan de Spiegeleire, and Tim Sweijs), The Hague, Netherlands: The Hague Centre for Strategic Studies, June 2009.

Future Issue Nanotechnology (with George Boone, Stephan de Spiegeleire, and Tim Sweijs), The Hague, Netherlands: The Hague Centre for Strategic Studies, December 2008.

"The Security Impact of the Neurosciences" (with Margaret E. Kosal), *Bulletin of the Atomic Scientists* (20 June 2008).

Presentations and Proceedings

Paper Presentation, “Scientific Feasibility, Requirements Stringency, and Technology Alternatives: Explaining Military Investments in Emerging Technologies as a First-Mover,” Junior Scholars Symposium, *Annual Convention of the International Studies Association*, March 2016, Atlanta, GA

Paper Presentation, “Explaining State Interest in and Choice of Military Investment in Emerging Sciences and Technologies,” *Annual Convention of the International Studies Association*, March 2014, Toronto, Canada

Paper Presentation, “The Dilemma of and Strategy for a Defense Technology First-Mover: An Opportunities Framework for Military Investments in Emerging Science and Technology,” *Georgia Tech Research & Innovation Conference*, January 2014, Atlanta, GA

Paper Presentation, “The Impact of Emerging Military Technology on the Human Element of Conflict,” (with Jarrod Rifkind), *Annual Convention of the International Studies Association*, April 2013, San Francisco, CA

Paper Presentation, “The Challenges of Emerging Technologies to the Human Assumptions in War Ethics,” (with Jarrod Rifkind), *US Army Command and General Staff College Ethics Symposium*, December 2012, Fort Leavenworth, KS

Poster Presentation, “The Impact of Emerging Military Technology on the Human Element of Conflict,” (with Jarrod Rifkind), *Annual Meeting of American Political Science Association*, August 2012 New Orleans, LA (conference cancelled)

Paper Presentation, “The Impact of Emerging Military Technology on the Human Element of Conflict,” (with Jarrod Rifkind), *Annual Conference of the Midwest Political Science Association*, April 2012, Chicago, IL

Paper Presentation, “Cognitive Sciences Research and Dual-Use Risks: Perspectives of Scientists on Security, Ethics, and Institutional Regulations,” *Annual Convention of the International Studies Association*, April 2012, San Diego, CA

Paper Presentation, “The Security Implication of Cognitive Neuroscience Research,” (with Margaret Kosal), *Annual Conference of the Society for the Study of Nanoscience and Emerging Technologies (S.NET)*, November 2011, Tempe, AZ

Paper Presentation, “The ‘Human’ Elements in Conflict: The Potential Challenges Cognitive Sciences and Related Security Applications Present to Conflict Situations and Decisions,” *Annual Convention of the International Studies Association*, March 2011, Montreal, Canada

Work in Progress

“Explaining Differences in Railroad Adoption in Qing Dynasty China and Meiji Japan” (with Jon Schmid)

“Historical Evolution of China’s Military Research, Development, and Acquisition System, 1949-Present.”

“The Impact of Emerging Military Technology on the Human Elements of Conflict.” (with Jarrod Rifkind)

“Emerging Technology and the Reconceptualization of Moral Agency in War Ethics”

Invited Lectures/Panel Participations

Guest Lecture, “Science and Challenges to the ‘Human’ Elements of War.” Scientific Perspective on Global Problems, Georgia State University (October 2013)

Guest Lecture, “Emerging Military Technologies and the Human Elements of Conflict.” Scientific Perspectives on Global Problems, Georgia State University (November 2012)

Panelist, “Engaging Conversations: Bringing Theory to Life in a Survey Course,” Georgia Institute of Technology, Center for Enhancement of Teaching and Learning (February 2012)

Panelist, “Scaffolded Curriculum for Preparing the Faculty of the Future” (Presented by Donna Llewellyn and Lydia Soleil), 36th Annual Professional and Organizational Development (POD) Network in Higher Education Conference, Atlanta, Georgia (October 2011)

Guest Lecture, “Government and Politics of Taiwan: A Nano-Sized Introduction.” INTA 1200 – American Government, Georgia Institute of Technology (November 2010)

Academic/Professional Workshops

Participant, “Worldviews in Science, Technology and Art in International Relations,” The Science, Technology and Art in International Relations Section Working Group, Annual Convention of the International Studies Association, New Orleans, LA (February 17-21, 2015)

Participant, National Defense Industrial Association, Science and Engineering Technology Conference/Defense Tech Exposition, Hyattsville, MD (April 8-10, 2014)

Participant, New Era Foreign Policy Conference, American University, Washington, D.C. (March 9 – 11, 2014)

Participant, Summer Training Workshop on the Relationship Between National Security and Technology in China. University of California Institute on Global Conflict and Cooperation (UCSD-IGCC), La Jolla, CA (July 21 – August 3, 2013, *with full funding*)

Participant, EU/US Research and Education Workshop: Internationalization of Research and Graduate Studies and Its Implications in the Transatlantic Context. Georgia Institute of Technology, Atlanta, GA (November 17-18, 2008, *funded*)

SELECT ACADEMIC HONORS AND AWARDS

Ivan Allen College Dean’s Fellowship, Ivan Allen College, Georgia Tech, 2008-2012

Outstanding Graduate Student Award, Sam Nunn School of International Affairs, Georgia Tech, 2009

BCES Fellowship for International Affairs, Sam Nunn School of International Affairs, Georgia Tech, 2007

Pi Sigma Alpha (Political Science Honor Society), Emory University, 2004

Phi Alpha Theta (History Honor Society), Emory University, 2004

Phi Sigma Iota (Modern Languages Honor Society), Emory University, 2004

Omicron Delta Epsilon (Economics Honor Society), Emory University, 2004

Advanced Language Study Abroad Grant, Emory University, 2003

SELECT ACTIVITIES

Service to the School

2011-Present Member, Library Graduate Advisory Board, Georgia, Institute of Technology

2010-2012 Member, Graduate Student Advisory Board, Ivan Allen College, Georgia Institute of Technology

2007-2012 INTA Ambassador, Sam Nunn School of International Affairs, Georgia Institute of Technology

2003-2004 Student Representative, Curriculum Committee, Emory University

2002-2004 Alternate Student Representative, Educational Policy Committee, Emory University

Social and Community Services

2007-Present Member, Vice-President (F08, F11), President (S09), International Affairs Graduate Organization

2006-2008 Chapter Advisor, Alpha Phi Omega, Delta Kappa, Emory University

2005-2007 Sectional Secretary, Alpha Phi Omega, Section 76

Professional Membership

2011-Present Midwest Political Science Association

2009-Present International Studies Association

2008-Present American Political Science Association

OTHER SKILLS

Proficient in SPSS, STATA, and GIS

Languages: Mandarin Chinese (Native), French (Working Knowledge)

REFERENCES

Dr. Margaret Kosal, Associate Professor, Georgia Institute of Technology (margaret.kosal@inta.gatech.edu)

Dr. Adam Stulberg, Professor, Georgia Institute of Technology (adam.stulberg@inta.gatech.edu)

Dr. Katja Weber, Professor, Georgia Institute of Technology (katja.weber@inta.gatech.edu)

Dr. Michael Salomone, Professor, Georgia Institute of Technology (Michael.salomone@inta.gatech.edu)