

Christopher H. Tomkins-Tinch

CONTACT INFORMATION

[omitted for web, see: www.christomkinstinch.com]

RESEARCH INTERESTS

systems engineering, knowledge discovery, remote sensing, embedded systems, sensor networks, human-computer interaction, social networking & collaborative software design, data sharing, GIS, high-performance computing, data fusion & visualization, and microfabrication

EDUCATION

Rochester Institute of Technology, Rochester, New York
Bachelor of Science in Bioinformatics, Minor in Imaging Science

- Expected graduation date: May 2012

Dutchess Community College, Poughkeepsie, New York
Full-time college coursework in place of senior year of high school

HONORS AND AWARDS

Academic Honors	US Department of Energy SERCh Poster Competition Finalist, 2009 RIT Student Innovation Award, Spring 2009 Dean's List, multiple quarters (RIT) President's List (DCC) Phi Theta Kappa (DCC)
Scholarships	RIT Presidential Scholarship Carlson Family Scholarship Carlson Imaging Excellence Scholarship Nathaniel Rochester Society Scholarship

SELECTED COURSEWORK

Imaging Science	Programming for Imaging Science; Radiometry; Geometrical Optics; Vision and Psychophysics; Imaging in the Physical Sciences; Intro to Imaging Systems; Detectors
General Science	University Physics I, II, III; General and Analytic Chemistry I, II, III; Modern Physics I
Mathematics	Single and Multivariable Calculus
Special Topics	Computers, Instruments, and Data Acquisition Techniques

PROFESSIONAL EXPERIENCE

Oak Ridge National Laboratory, Oak Ridge, Tennessee
Contact: David Resseguie, resseguiedr@ornl.gov (865)241-5385; or Edmon Begoli, begolie@ornl.gov (865) 241-1923

Student Research Assistant **October 2009 – present**
ORNL Co-op Student **June 2009 – August 2009**
DHS Intern & ORNL Co-op Student **June 2008 – March 2009**

Participated in the design and development of the *Sensorpedia* project under a Department of Homeland Security (DHS) summer internship. Responsibilities included research and evaluation of emerging web, social and collective intelligence technologies, software framework development, branding and graphic design, backend programming, and utilization of Web 2.0 technology for sensor integration and emergency response systems. Continued work on the *Sensorpedia* project under two Oak Ridge National Laboratory educational co-ops. Responsibilities were extended to include embedded systems and sensor interfacing. Single-handedly implemented an iPhone application and associated web service for Sensorpedia. Later brought on for a fourth co-op to research and prototype resilient cross-platform mobile applications for emergency response. Worked as a member of the *Computational Sciences and Engineering Division*.

RIT Center for Imaging Science

Laboratory for Imaging Algorithms and Systems, Rochester, New York

Contact: Robert Kremens, Ph.D., kremens@cis.rit.edu (585)475-7286

Laboratory Assistant

April 2007 – present

Supported wildfire research; worked on management of data flow from distributed sensors, remote sensing, C# programming, embedded systems, systems integration, mechanical design, mechanical assembly, and web development

RIT Department of Information Technology, Rochester, New York

Contact: Jon Schull, Ph.D., jis@it.rit.edu (585)738-6696

Teaching Assistant

March 2009 – May 2009

Research Assistant

January 2009 – May 2009

Developed an embedded hardware solution for aggregating data from mobile phones, and created an associated web service to provide this information in real-time. Assisted teaching and research activities of undergraduate and graduate students in a course covering *Innovation and Invention*.

Dutchess Community College, Poughkeepsie, New York

Student Aide, Department of History and Government

May 2006 – August 2006

Marist College Institute for Public Opinion, Poughkeepsie, New York

Public Opinion Interviewer

May 2005 – August 2005

PUBLICATIONS

Conference Proceedings

Gorman, B.L., Resseguie, D.R., Tomkins-Tinch, C.H. Sensorpedia: Information Sharing Across Autonomous Sensor Systems. International Symposium on Collaborative Technologies and Systems 2009 (CTS 2009). May 18-22, 2009, Baltimore, Maryland, USA. Page(s):448 - 454

Posters

Kremens, R.L., Drake, R., Hovey, A., Bove, G.E., and Tomkins-Tinch, C.H. Inexpensive Buoys for Environmental Education and River Water Quality Assessment. Poster session at the *International Association for Great Lakes Research* 51st Annual Conference, May 19-23, 2008, Peterborough, Ontario, Canada

Tomkins-Tinch, C.H. The Sensorpedia Mobile Framework: Enabling Citizen Sensors. Poster session at the US Department of Energy Science and Energy Research Challenge National Student Poster Competition, November 9, 2009, Oak Ridge, Tennessee, USA

TECHNOLOGY SKILLS

Operating Systems: UNIX/Linux, Mac OS X, Microsoft Windows (NT, 2000, XP), DOS

Programming: Python, C#, Java, AJAX/PHP/HTML/CSS, Obj-C, IDL, BASIC, SQL, C/C++

CAD Packages: CADKEY, AutoCAD, SketchUp

Framework(s): Zend Framework, Webpy, CocoaTouch

Hardware: Soldering, embedded systems, microcontrollers

Publishing: L^AT_EX

PROFESSIONAL MEMBERSHIP

IS&T(The Society for Imaging Science and Technology, RIT Student Chapter)

AAAS(The American Association for the Advancement of Science)

IEEE(Institute of Electrical and Electronics Engineers)

IEEE Communications Society

SPIE(Society of Photo-Optical Instrumentation Engineers)

COMMUNITY ACTIVITIES

RIT Caroline Werner Gannett Project Speaker Series (<http://www.cwgp.org>)

Advisory Board Core Working Group

September 2007 – present

RIT Make Club (<http://www.makeclub.org>)

Founder and acting President

January 2008 – present

Imaging Science and Technology Club (RIT Student Chapter)

Member

Fall 2006 – present

Outing Club (RIT)

Member

Fall 2006 – present

Boy Scouts of America

Eagle Scout and Merit Badge Counselor

1998 – present