

Bradley Cheetham

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Education **University of Colorado at Boulder**

Master of Science, Aerospace Engineering Science, Expected 2011
Doctorate of Philosophy, Aerospace Engineering Sciences, Expected 2014
▪Research Associate – Colorado Center for Astrodynamics Research (CCAR)

University at Buffalo, The State University of New York

Bachelor of Science, Aerospace Engineering and Mechanical Engineering, Summa Cum Laude, May 2009
▪GPA 3.9/4.0
▪International Study – University of Technology of Troyes France, Summer 2006

Honors

2009 SUNY Chancellors Award, 2008 Goldwater Scholar, University Honors College (Scholar 2005 – 2009),
Tau Beta Pi (Vice President), Pi Tau Sigma, NASA Space Grant Fellowship, Zimmer Undergraduate Research
Award, SEDS-USA Local Executive Board Member of the Year (2007),
Board of Advisors – Coalition for Space Exploration, Policy Committee – National Space Society

Work

Experience

CCAR Research Associate, University of Colorado at Boulder, Colorado Center for Astrodynamics Research
Exploring target selection schemes for space telescope-occulter system in Earth-Sun L2 region
Advised by Dr. George Born and Dr. Webster Cash
▪Developed research procedure for analyzing orbital trajectories and space telescope-occulter alignment using
Matlab, TurboProp, and GMAT softwares

NASA Academy Research Associate, NASA Goddard Space Flight Center

Design and analysis of weak stability boundary transfer orbit for Artemis mission (David Folta code 595)
▪Validated JPL mission orbital design using GMAT software
▪Participated/assisted in mission planning meetings and mission design review presentations

Projects

Lunar Excavator Design, Analysis, and Construction, University at Buffalo

Principal investigator and NASA Space Grant fellowship recipient, September 2007 – May 2008
▪Initiated project, formed team, proposed research, secured faculty advisor (Dr. Venkat Krovi, NSF CAREER)
▪Researched, designed, and virtual prototyped lunar regolith excavator with team of two other students

Independent Undergraduate Research - Premixed Laminar Flame Speed, University at Buffalo

Advised by NSF CAREER Recipient (Dr. Paul DesJardin), January 2007- May 2008
▪Developed experimental setup/technique to measure premixed laminar flame speed behavior
▪Wrote research proposal, organized budget, executed experiment, analyzed data, and prepared technical report

Leadership

Goddard Space Flight Center NASA Academy

Group Project Leader – The Roadmap to a Space Faring Civilization, Summer 2008
Project addressed the commercial development of space
▪Proposed project topic, delegated responsibilities, and facilitated discussion
▪Integrated sections of paper, edited final report, coordinated with outside advisers

University at Buffalo Students for the Exploration and Development of Space (UB SEDS)

Chapter co-founder and president, April 2007 – May 2008
▪Lead meetings and discussion on space related topics, organized educational outreach/community events
▪Increased membership by 300%, raised more than \$2000.00, organized multiple campus-wide events

- University Work Experience**
- Course Assistant**
University of Colorado at Boulder – Graduate Space Flight Dynamics Course, August 2009 – Present
- Assist student with and grade homeworks assignments, run course labs
- Community Assistant/Resident Advisor**
University at Buffalo – University Residence Halls and Apartments, August 2006 – May 2009
- Served as mentor, liaison, policy enforcer, and community leader, organized and ran targeted programming
- Student Teaching Assistant**
University at Buffalo – Engineering and Applied Sciences Lab, September 2006 - December 2006
- Aid in computer lab with teaching, curriculum, assignments, and student questions
- Outreach Projects**
- Inspiration from Exploration™**, Creator/Presenter (www.IfroM.org)
- Initial outreach presentation to ~250 Buffalo inner-city middle school students – future events anticipated
 - Solicit donations, financial, and teacher support to inspire students using space exploration
- Explorer Fish Associates**, Founder and Executive Editor (www.ExplorerFish.com)
Exploration news source for everyday explorers
- Assembled team of contributors, Emmy Award winning executive producer, and show host
 - Developed company plan/model and manage content
- University at Buffalo Space Outreach Fellowship**, Creator
Fellowship supports one student to develop and implement space outreach events and activities
- Secured funding, faculty support, and inaugural fellow
 - Continue to support fellowship as adviser
- UB SEDS Director of Educational Outreach**, Created position and served from 2008 – 2009
Organized volunteers and hands on activities for outreach events to local community
- Spring 2009 activities at Buffalo Museum of Science had over 1400 participants (children/parents)
- Conferences**
- Space Frontier Foundation’s NewSpace Conference**, NASA Ames Research Center – July 2009
- Day manager responsible for programmatic planning, speaker invitations/contact, running sessions/panels
- National Space Society’s International Space Development Conference**, Orlando Florida, May 2009
- Managed logistical support and VIP relations for largest public focused space conference in the world
 - Presented: “Student Congressional Advocacy” and “Public Outreach Projects Workshop”
 - Managed VIP relations for ISDC 2008, Washington D.C.
- SEDS North-East Regional Conference**, Mass. Institute of Technology, April 2009
- Keynote address “Creating OUR Future in Space” and chair of educational outreach workshop
- SEDS SpaceVisions Conference**, Mass. Institute of Technology, November 2007
- Proposal for SEDS Space Mentors Program
- Skills**
- Language- 5 years Spanish instruction, exposure to Spanish, French, German, and Greek language and culture
Computer: Matlab, MS Office Suite, AutoCAD, Wildfire ProE 2.0, SolidWorks, GMAT (NASA), Joomla