

NASA Nebraska Space Grant

Science Technology Engineering Mathematics

2011 Student Fellowship Recipients

University of Nebraska - Lincoln



Tom Frederick is currently a Master's student in the Mechanical Engineering Department at the University of Nebraska at Lincoln. He is currently a research assistant for Dr. Farritor in the Advanced Surgical Technologies Lab, developing robots for minimally invasive surgery. During his spare time, he is involved with helping the CREATE Foundation, whose mission is to inspire and prepare future engineers and scientists. Frederick's NASA Space Grant fellowship will enable him to intern at Devicix Medical Design Firm during the summer of 2011.



Eric Fritz is currently a student at the University of Nebraska at Lincoln. His major is Mechanical Engineering. Eric works part time as a lab TA, and as an undergraduate research assistant to Dr. Yuris Dzenis on production and mechanical testing of silk polymer nanofibers. Eric is also a member of the UNL Microgravity University SEED team, sponsored by the NASA Nebraska Space Grant. Eric will be spending this summer as an intern at NASA's Jet Propulsion Laboratory.



Nate Otten is currently a student at the University of Nebraska at Lincoln. His Major is Mechanical Engineering. In the summer of 2009, he interned at Honeybee Robotics, a small aerospace mechanisms corporation in Manhattan, New York. In 2010 he spent the summer as an intern at NASA's Jet Propulsion Laboratory in Pasadena, California. In the summer of 2011, he will be an intern at Lockheed Martin Space Systems Company in Denver, Colorado. He is also working as an undergraduate research assistant for Dr. Shane Farritor in the Advanced Surgical Technologies Lab, where he aids in the development of miniature in vivo surgical robots and supporting systems.



Ryan McCormick is currently a student at the University of Nebraska at Lincoln. He is currently pursuing his Masters in Mechanical Engineering. He received a Bachelor of Science degree in Mechanical Engineering in May of 2009. He is currently performing research in the design of miniature in vivo surgical robots for use on future space missions under the guidance of Dr. Shane Farritor.



Jack Mondry graduated from the University of Nebraska at Lincoln with his Bachelor of Science degree in Mechanical Engineering in May of 2010. He served as a president of the American Society of Mechanical Engineers. In spring of 2009, he was the team leader of the NASA Microgravity University project. This project involved studying effective methods of transporting an incapacitated astronaut during a lunar mission. He is currently pursuing his Master of Science degree in Mechanical Engineering under the direction of Dr. Shane Farritor. He is a graduate research assistant in the Advanced Surgical Technologies Lab researching robots for minimally invasive surgical procedures. He is also participating in the 2011 NASA Jet Propulsion Lab summer internship program.



Tyler Wortman is currently a student at the University of Nebraska at Lincoln. He received a Bachelor of Science in Mechanical Engineering in May 2009 and is now pursuing a Master of Science degree in Mechanical Engineering under advisor Dr. Shane Farritor. His research interests are in the development and application of surgical robots capable of minimally invasive surgery. Last summer, he interned at the NASA Jet Propulsion Lab. In the summer of 2011 he will participate in an internship with Honeybee Robotics and Spacecraft Mechanisms.



Alexandra Toftul is currently a student at the University of Nebraska at Lincoln. She is Majoring in Electrical Engineering and Mathematics. She is a member of the Institute of Electrical and Electronics Engineers, the American Institute of Aeronautics and Astronautics, and the Society of Women Engineers. She is also a Garmin Scholar in Electrical Engineering and an Eastman Scholar in Mathematics. This past summer she participated in a Space Grant funded internship at Marshall Space Flight Center and also recently completed a USRP internship at Dryden Flight Research Center. She plans to pursue a graduate degree in Electrical Engineering and hopes to one-day work for NASA. Alexandra is spending the summer interning at Marshall Space Flight Center and continuing to work on her project from last semester.



Isaac Anderson is Computer Engineering student at the University of Nebraska at Lincoln.



Jacob Anderson is currently a student at the University of Nebraska at Lincoln. He is pursuing his Master's degree in Atmospheric Sciences. He received his Bachelor's in Meteorology and Climatology in 2010. He is currently researching aerosols and their impact on climate. He will be attending the NASA Goddard Space Flight Center to research aerosol data quality.

University of Nebraska at Omaha



Ben Beller is currently a student at the University of Nebraska at Omaha. He is pursuing a Master's degree in Biology. He received his Bachelor's in Biology from Creighton University in May 2009. He is currently researching the fire history of Shark Bay in Western Australia using aerial and satellite imagery.

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