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# **Issue 17: Contributors**

**Don Flournoy** 

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Issue 17: Contributors



Erik Alexeff

Erik Alexeff was a Bachelor's student in Communications Sciences at Ohio University. While there he studied all aspects of media production and live theater. His interests include audio, video, gaming and animation. He has worked on various independent films while at Ohio University as well as an intern at Stickmen Studios in New Zealand and at the Parma Area Community Television station in Ohio.



Max Alvarez

Max Alvarez is currently approaching his Junior year as a major in the Digital Media: Special Effects and Animation sequence at Ohio University. He as already worked as the producer on a student video game project and he plans on continuing to develop his knowledge and skills in the video game design field.



Matthew Anderson

Matthew Anderson graduated with a B.S. in Technology from UND spring of 2012, where he was awarded the 'Student Excellence Award' in Technology. He also holds a degree in Machine Tool Technology from Riverland Community Technical College, 2004. Anderson has experience as a machinist while working at SAR Incorporated, Albert Lea, MN, 2004-2007. Matthew is a Co-Founder of start-up company 'Power Evolved.'



Tyler Ayres

Tyler Ayres earned a BS in Visual Communications and a MFA in Digital Animation and Visualization from The Ohio State University. He is currently an Assistant Professor in the School of Media Arts and Studies at Ohio University. His primary interests are in animation and games with a focus on children's entertainment and education.



Natasha Barbely

Natasha Lydia Barbely is currently a graduate student in Professor Narayanan Komerath's Experimental Aerodynamics and Concepts Group Lab at the Georgia Institute of Technology. She completed her undergraduate degree at the Georgia Institute of Technology with honors in May 2011. In January of 2008 she began and continues to Co-Op at the National Aeronautics and Space Administration (NASA) Ames Research Center in the Aeromechanics Branch and specializes in Rotorcraft Aeroacoustics.



Corey Bergsrud

Corey Bergsrud is currently a Ph.D student in Engineering at UND. He holds a M.S. in Electrical Engineering (EE) and a B.S. in Mathematics and EE also from UND. Corey has been a paid applied electromagnetics researcher since fall of 2010 researching Electromagnetic Band gap Structures, and has interned with NASA Langley Research Center, Hampton, VA, the summer of 2011 as a researcher and systems engineer regarding infrasound and infrasonic instruments. He has also accumulated about 3 years of teaching/tutoring experience in college level math and physics. Bergsrud is also a founder and CEO of a start-up company 'Power Evolved.'



Michael Blohm

Michael Blohm was a undergraduate student at Ohio University. He studied game development in the School of Media Arts & Studies, and has gone on to program games for startup studio Lightborne Lore. Michael has contributed to two animations for the SunSat Design Competition in technical and animating capacities.



Harold Bonn

#### Steve Bonahoom

Steve Bonahoom contributed original artwork and digital designs in the Ohio University Creative Visualization of Space Solar Power. Now graduated, he continues to purse these interests in website coding and designs, producing and coding websites, producing and editing digital videos and photographs, creating new graphics from scratch.

### Solomon Brown



**Kristin Brumley** 

Kristin Brumley has her B.A. in Digital Media Design from Muskingum University and is graduating with her M.A. in Media Management from Ohio University this summer. She specializes in interactive media and its effects on its audience, and has a particular love for green tea.



Steve Buchanan

Steve Buchanan is an undergraduate pursuing his Digital Media degree at Ohio University. He is beginning his final year and has plans to attempt a game project with his fellow students over the course of the next year. His specialization is in design and 3D modeling. He spends his free time cooking and practicing martial arts.



Jason Butler



Dr. James Casler

Dr. James Casler, P.E. is an Associate Professor at UNDs Space Studies Department.



Dr. Isaac Chang

Dr. Isaac Chang is an Assistant Professor at UNDs Technology Department.

### Mike Cisneros

# Director of Photography.



Jimmy Clark



Matthew Clausing

Matthew Clausing is a senior student in the Technology Department at UND, expected spring of 2013. Clausing is focusing on the electronics portion of Technology and is a very talented hands-on technician. His hobbies are building and testing integrated electronic and mechanic systems. He has also been with the US Army Reserve since August 12, 2004. Matthew is a Co-Founder of start-up company 'Power Evolved.'



### Jake Coggiano

Jake Coggiano is an undergraduate student in Ohio University's Digital Media degree program, currently working with his fellow students on a commercial game project as the lead programmer. His areas of focus are level design, programming, and 3D modeling. In his free time Jake enjoys tinkering with computers and being involved with his local Boy Scout troop.



**Dean Davis** 

Dean Davis is the Lockheed Martin Aeronautics Skunk Works F-35 Lightning-II Joint Strike Fighter (JSF) Chief Mission Systems Flight Test Engineer at Edwards Air Force Base, California. A University of Colorado graduate who specializes in physics, aerospace engineering and astrogeophysics, he also went to Denver Metro State College for computer science and the University of Denver for systems engineering.

Mr. Davis has 34 years experience as a flight test engineer, operations research and intelligence analyst, aircraft/spacecraft design engineer, planetary scientist, systems engineer, survivability/vulnerability engineer and human factors engineer for Lockheed Martin, Boeing, Northrop Grumman, Raytheon, Hughes, TRW, Allied Signal, Honeywell, Computer Science Corporation, and General Dynamics, as well as, his own company Star Tech International Corporation.

His awards include being named a 2011 American Institute of Aeronautics & Astronautics (AIAA) Associate Fellow; 2010 National Coalition of Aeronautics and Space Education (NCASE) Aerospace Education Leadership Crown Circle; and 2011 Strictler Awards.



John Dees

John Dees is an undergraduate student in the Ohio University School of Media Arts and Studies, on track to graduate with a Digital Media: Special Effects, Gaming and Animation Degree in the year 2012. His interests include art creation and game design.



Brendan Dessanti

Brendan Dessanti received his B.S. degree in Aerospace Engineering from the Georgia Institute of Technology in 2011 and is currently pursuing an M.S. Degree in Aerospace Engineering from Georgia Tech. Brendan is a graduate research assistant for the Experimental Aerodynamics and Concepts Group at Georgia Tech and leader of the Space Power Grid student team. Brendan has obtained invaluable experience from internships at Sikorsky Aircraft, MIT Lincoln Laboratory and SpaceWorks Enterprises, Inc. .



**Timothy Dito** 

Timothy Dito graduated with a B.S. in EE from UND the fall of 2011. He is currently employed as an electrical engineer at RFA/Minnesota Engineering, Eden Prairie, MN, since 2/13/2012. Tim has also gained experience as a Co-Op the spring and summer of 2010 for Goodrich Corporation where he was involved with the environmental, electromagnetic, and high voltage testing of new prototype products in development. Timothy is a Co-Founder of start-up company 'Power Evolved.'



Kent Engle

# Anthony Feola

Anthony Feola is an undergraduate studying Digital Media at Ohio University. He is interested in creating 3D environments for video games. He plans on working at a major game company when hegraduates. He helped to create some of the 3D visuals on this project.



Dr. Ron Fevig

Dr. Ron Fevig is an Assistant Professor at UNDs Space Studies Department.



**Brandon Flayler** 

Brandon Flayler



Don Flournoy

Don Flournoy is a professor of telecommunications in the Scripps College of Communication at Ohio University Athens, and editor of the Online Journal of Space Communication. He served on the Board of Directors of the Society of Satellite Professionals International from 2003-2009 as VP of Education and co-chair of the SSPI Academic Council. He has taught satellite communications at Ohio University since 1986. Beginning in 2010, Prof. Flournoy has engaged his students in projects related to the "visualization of space solar power." They have launched a 2012-2014 international Sunsat Design Competition in cooperation with the National Space Society, the Society of Satellite Professionals International and the Ohio University GRID Lab. Dr. Flournoy is the author of Solar Power Satellites (Springer 2012). His full vita can be viewed at http://spacejournal.ohio.edu/.



Lewis M. Fraas

Lewis M. Fraas has been active in the development of Solar Cells and Solar Electric Power Systems for space and terrestrial applications since 1975. In 1978 while at Hughes Research Labs, he published a pioneering paper proposing the InGaP/GaInAs/Ge triple junction solar cell predicting a cell terrestrial conversion efficiency of 40% at 300 suns concentration. This 40% efficiency has now been achieved and this cell is the predominant cell today for space satellites. It is now entering high volume production for terrestrial Concentrated Photovoltaic (CPV) systems. In 1989, he led the research team at Boeing that demonstrated the first GaAs/GaSb tandem concentrator solar cell, receiving awards from Boeing and NASA for this work. From 1993-present, Dr. Fraas has been President of the solar cell company JX Crystals Inc. He holds degrees from Caltech (B.Sc. Physics), Harvard (M. A. Applied Physics), and USC (Ph.D. EE). Dr. Fraas has written over 350 technical papers, holds more than 50 patents, and is the author of a book entitled Path to Affordable Solar Electric Power & The 35% Efficient Solar Cell (2005). He is co-editor and co-author of a Wiley book entitled Solar Cells and Their Applications (2nd Edition) published in 2010.



**Chase Freidig** 

Chase Freidig is a senior in the EE program at UND, expected spring of 2013. He is currently the president of the IEEE student chapter at UND and is VP of the UND chapter of Engineers without Borders, an organization to provide humanitarian projects, with an engineering focus, for underprivileged communities. Chase has work experience from interning at John Deere Electronic Solutions in Fargo, ND, May 16, 2011-January 5, 2012 and currently May 14, 2012-August 17, 2012. He has experience with hardware, PCB, and product test designs. Chase is a Co-Founder of start-up company 'Power Evolved.'



Peter Garretson

Peter A. Garretson is the chief, future science and technology exploration, for the U.S. Air Force. He has studied advanced space and energy concepts for the U.S. Department of Defense and was one of the principal authors of the NSSO report on space-based solar power. Mr. Garretson earned a BS from the U.S. Air Force Academy and an MA from Embry Riddle Aeronautical University. In January 2009, he served as an International Affairs Fellow (of the U.S. Council on Foreign Relations) at the India Institute for Defense Studies and Analyses, researching the basis for space and energy cooperation between the United States and the country of India. In 2010-2011, he authored Space-based Solar Power: The Next Major Step in the Indo-US Strategic Partnership.



Al Globus

Al Globus is the chairman of the Space Settlement Committee of the National Space Society. He has published articles on space solar power, space settlement design, lunar teleoperation, nanotechnology, and a variety of computer science topics while working for contractors at NASA Ames Research Center.



Tyler Goldberg



Mark Grady

Mark W. Grady is a 2011 graduate of Ohio University where he earned a B.B.A. (Magna Cum Laude) with a concentration in Finance.



Ryan Heitkemper

Ryan Heitkemper is an undergraduate student at Ohio University taking courses to graduate with a degree in Digital Media: Special Effects, Games, and Animation by class of 2013. He is mainly focused on game creation. Ryan Heitkemper is a Junior majoring in Digital Media: Special Effects Games and Animation sequence at Ohio University. He has participated as one of the lead CG artists for a student video game project and plans on going to grad school to continue pursuing his career in the video game design field.



Dyah Hening

Dyah Ariningtyas Hening is from Bandung, Indonesia and is currently pursuing her Ph.D. in Mechanical and Systems Engineering. Her interest in media and art has grown as her hobby. She likes to try new things, learning different languages and cultures, sports, and music.



Ben Holschuh

Ben Holschuh is currently studying Digital Media at Ohio University with a focus in Game Development and Production. He is also working as Associate Producer for SynapticSwitch LLC. When he has free time, he likes to play the guitar or piano. For the sun satellite project he worked on the Ohio's Longterm Energy Solution and wrote up the initial scripts, composited the final videos and rendered it into one final product.



**Royce Jones** 

Mr. Jones is a Space technology entrepreneur, venture manager, IP developer and space investor, injecting start-up capital and IP into new space ventures. He is a published author with innovative approaches to space development in the area of Launch vehicles and space based solar power. Mr. Jones is a known innovator in field of commercial and difficult project finance, structuring commercial financing, asset backed financing, TIF financing, Tax credits and Government backed financings.



Matt Kissell

Matt Kissell graduated from Ohio University in May of 2014 with a B.S. degree. Focusing in video editing Matt went on to be a freelance editor in NYC where he currently resides. Working primarily in documentaries and commercials, Matt has also worked as assistant editor on a feature film that is set to be released early in 2015.



Dr. Narayanan Komerath

Narayanan Komerath received his B.Tech AE from IIT Madras, MSAE and Ph.D. from Georgia Tech's School of Aerospace Engineering, where he is a professor. He served as a Boeing Welliver Summer Faculty Fellow in 2004. He was a Fellow of the NASA Institute of Advanced Concepts. He directs the Experimental Aerodynamics and Concepts Group, including the John J. Harper low speed wind tunnel. He has guided 15 PhDs and published over 300 papers from 100 research projects. From 2005 to 2006 he served as a Sam Nunn Senior Fellow of the Center for International Security, Technology and Policy in Atlanta, where his team conceptualized the Space Power Grid as a synergistic way to bring about Space Solar Power.



Colin Mercer



Dan Miller

Dan Miller is an undergraduate studying digital media at Ohio University. In his free time he enjoys working with computers, playing videogames and exercising. For this project he helped create 3D visualizations as well as research and coordinate the Ohio's Long Term Energy project.



Nadiah Mukhiar

Nadiah Mukhiar is a doctoral student at School of Media Art and Studies. She holds a B.IT (ISE) from Multimedia University, Malaysia and an M.A. (Communication) from Universiti Sains Malaysia. Her area of interests are in Corporate Communication and Anthropology. She also enjoys taking pictures of children and babies.

#### Connie Nemec

Connie Nemec, for the Ohio University Creative Visualization of Space Solar Power project, worked as a researcher and videographer while majoring in video production. Since graduation, she has worked at Disney and now moved to Wilmington, NC.



# Huyen Nguyen

Huyen Nguyen is an MA student in School of Media Arts and Studies, Ohio University. Her research interests are visual communications and communications policy. She always forgets what she learned, that's why she keeps learning.



Dr. Sima Noghanian

Dr. Sima Noghanian is an assistant professor at UNDs Electrical Engineering (EE) Department with a specialty in Antenna and Applied Electromagnetics.



Kristen Ohlemeier

Kristen Ohlemeier graduated from Ohio University in June 2011 with a B.S. in Digital Media, emphasis in 3D modeling, and a minor in English.



Adedayo Ogundimu

Adedayo Ogundimu, a Nigerian, is a Community Mobilization/Community Development Specialist with 22 years' field experience in the planning and management of sustainable development project interventions. Dayo is interested in applying space solar power for irrigation and preservation fruits and vegetables in Nigerian rural communities. This will go a long way to eliminate wastage, assure year-round supply, generate more employment, increase rural income and reduce poverty

#### Chris Ovak

Chris Ovak was an undergraduate studying Video Production at Ohio University when he worked on the Creative Visualizations of Space Solar Power. He also worked on WOUB Newswatch, and produced two short films. Chris intends to pursue a professional career as a videographer.



Rahim Panjwani

Rahim Panjwani is a 3rd year Aerospace Engineering student at Georgia Institute of Technology from Phoenix, Arizona. He has been tasked with creating the MATLAB code to model ISS motion with certain input parameters. In addition to his major, he is minoring in Computer Science and Economics to diversify his skill set. He attributes his passion for aerospace and flight in general to his dad teaching him how to make paper airplanes. In the future, he hopes to work for NASA.

**Chinar Patel** 

Prior to enrolling in Georgia Institute of Technology in Fall of 2001, Chinar Patel attended Rensselaer Polytechnic Institute and Atlantic Armstrong State University. She is currently pursuing a bachelor degree in Aerospace Engineering and plans to graduate in 2014. During her time in Atlantic Armstrong State University, she did research for Dr. Cameron Coates on the topic of forearm implants. After joining Georgia Institute of Technology, Patel began research in the Experimental Aerodynamics Lab with Dr. Narayanan Komerath and joined the Space Power Grid project.



**Kyle Perkins** 

Kyle Perkins was a Digital Media student in Ohio University's Honors Tutorial College. He received his bachelor's degree from OU in 2010, focusing his studies on digital game design. He completed an undergraduate thesis on immersion in open-world role-playing games, examining the coexistence of narrative and gameplay and how the two can work together to provide an incredibly personal game experience. Kyle worked with Professor Don Flournoy to create the International SunSat Design Competition, its website, and two animations during the competition's preliminary phases. After graduation, Kyle founded the Athens-based games and animation company, Lightborne Lore.



Nicholas Picon

Nicholas Picon is in his second year at Georgia Tech pursuing his B.S. degree in Aerospace Engineering. He is also working on his minor in Computer Science with a concentration on Artificial Intelligence. Nicholas has spent three semesters working in the Experimental Aerodynamics and Concepts Group at Georgia Tech, where his main role was designing constellations to optimize coverage time for various orbital networks. Nicholas has co-authored several papers on the subject of wireless power transfer through space and advised Boeing on

trade studies requiring optimization of orbital networks. He plans to intern with Rolls-Royce in the Summer.



Clint Riddell

Clint Riddell is enrolled in a combined BS/MS program in neuroscience through the Honors Tutorial College and the Department of Biological Sciences at Ohio University. He was an intern as a business management and technology consultant for TechGrowth Ohio during the time he was helping the Ohio University Creative Visualization students develop their business plans. Currently, he is forming a business focused on developing innovative technologies for delivering online education, and intends to pursue this full-time upon graduation.



**Carlos Rios** 

Carlos Rios is currently completing his B.S. in Computational Media at the Georgia Institute of Technology. His interests within his degree program are web and graphic design, video production, and educational technology. He also works as a research assistant at the Georgia Tech Research Institute designing educational flash games and safety training materials for young workers in collaboration with the Georgia Tech OSHA Consultation Program. As of July 2011, Carlos is a cancer survivor.



Adam Roades

Adam Roades is Magna Cum Laude graduate of Ohio University's Digital Media program, specializing in digital animation. With an independent interest in space technology and development, he has been involved in the creation of animations for the SunSat Design Competition. His work has been shown at the International Space Development Conference in both 2010 and 2011. This work was completed when he was a student at Ohio University and later with the Athens-based company, Lightborne Lore.



**Shelby Roades** 



Dr. Hossein Salehfar

Dr. Hossein Salehfar is a Professor and Interim Chair at UNDs EE Department with a specialty in Power and Energy Systems.

#### Zo Seszut



Shaan Shah

Shaan Shah is a senior at Georgia Tech, pursuing B.S. in Aerospace engineering. He is involved in extensive undergraduate research as a part of the Experimental Aerodynamics and Concept Group mainly focusing on research involving Space-based Power Grid. He has contributed to the research by studying breakthroughs in materials and technological advances related to space-based solar systems, and brainstorming ideas. In his free time he enjoys building RC Airplanes, studying mathematics and playing soccer.

### Somil Shah

Somil Shah is from Nashua, NH, currently an undergraduate student at the Georgia Institute of Technology studying aerospace engineering. In addition to researching with Dr. Narayanan Komerath as a part of his Experimental Aerodynamics and Concepts group, he is a co-op employee in propulsion engineering at Delta Air Lines. He belongs to a number of campus organizations including Design Build Fly, the Yellow Jacket Flying Club, the School of

Aerospace Engineering Student Advisory Council, and the National Society of Collegiate Scholars. He enjoys traveling, learning new langueages and music.



Rashmi Sharma

Rashmi is a Ford Foundation Fellow from India. Before coming to Ohio, she worked for World Bank project for Decentralized Watershed Management in the Himalayan region of India. She enjoys working with mountain communities and her interest is documenting stories of participatory development. As part of her work, she has created short films telling community members' stories, and also created various print media for development.

Michael Stephens

## Phanuthep Sutthithepthamrong

Phanuthep Sutthithepthamrong directed the intro node in the Ohio University Creative Visualization of Space Solar Power. Currently, he is a second year Ph.D. student in Media Arts & Studies at Ohio University. He has a strong background in Thai animation and film. He directed his own short live action film "World's End" that appeared in many film festivals.



Jessica Staub Jessica Staub, an undergraduatestudying Game Design, contributed infographics and animation forthe Ohio University Creative Visualization of Space Solar Power. Nowgraduated, she works as a Content Coordinator for an indie game company called indiePub.



W. Kent Tobiska W. Kent Tobiska's company is Space Environment Technologies/SpaceWx in Pacific Palisades CA. He earned his M.S. and Ph.D. in Aerospace Engineering Sciences from the University of Colorado. He is currently Director University of Southern California Center for Space Weather.



Lauren Valko

Lauren Valko is an undergraduate student in Ohio University's School of Media Arts and Studies. Her academic interests include 2D and 3D animation. She has hopes to become a professional character designer and animator. In this project, her skills were demonstrated in the 2D art created for the Solar Sails for SSP visualization. Lauren shares a great love for foreign films and nerd culture.



Alex Welsh

Alex Welsh is a Christ-follower, leader, collaborator, game designer, and entrepreneur who is entering his final year at Ohio University as a Digital Media major. He designs games based on Biblical principles to bring people together in community. He has a passion for creative ventures, pushing boundaries, and connecting with people.



Samantha Williams

Samantha Williams is a Digital Media and Communications junior undergraduate at Ohio University (Athens, Ohio). Double-majoring in Computer Science, she plans to produce video games and animations for a living. She is a member of the newly-founded Athens media and games company, Lightborne Lore LLC, and participated in the company's first project, a SunSat animation in partnership with Royce Jones that demonstrated the benefits of a new satellite orbit in gathering solar power.



Alex Wiseman

Alex Wiseman is an undergraduate at Ohio University studying in the Digital Media program in hopes to become a professional game designer. He was part of the Energy for Agriculture team and helped in the creation of the website. Alex has also worked with a team to create the game Gull for a class.



**Brian Woods** 

Brian worked as a news videographer for almost a decade before serving in the United States Peace Corps as an English teacher in Ukraine. Since completing his service, he has been active in documenting the history of the Crimean Tatar ethnic minority. His main interest is using communication theory to work towards social justice.



Matt Wulker

Matt Wulker is a recent graduate from the Digital Media program at Ohio University. He has changed career paths and is now attending the Great Oaks Police Academy in Cincinnati Ohio. He says, "I had a wonderful experience at Ohio University and was able to work with great students and professors on some amazing projects. The Solar Power Visualization was a huge highlight for me and a very proud moment when we were able to showcase our animation at ISDC-Chicago. It has been exciting for me to see the technologies that law enforcement is utilizing and how similar they are to the tools we used to create our visualization. Maybe one day our police vehicles will be powered by space solar power!"

**David Young** 

David Young contributed original audio and music to both the 2011 and 2012 Creative Visualizations of Space Solar Power as an Ohio University student. Now graduated, David is a composer, producer, and keyboardist living and working in Athens, Ohio, as Audio Director for the indie game studio Lightborne Lore.



Jiexiong Zhang



Anthony Zoccola