52 Consortia:
Every state + D.C. and Puerto Rico

987+ Affiliates:
652 higher education
87 industry
83 governmental (state/local/federal)
76 museum/science centers
89 other local partners

Public/Private Partnerships

Established by Congress in 1987:
Public Law 100 - 147

Virginia Space Grant began in 1989
**Space Grant Goals**

- Establish **state and national networks** of universities with capabilities in aerospace-related fields.
- Promote **strong science, engineering, and technology education** from elementary through university levels.
- Foster **workforce development** through building the nation’s talent pool in STEM fields.
- Develop **cooperative programs** among universities, all levels of government, and industry.
- Build research infrastructure at Virginia’s Space Grant Universities.
- Recruit **women, underrepresented minorities, and persons with disabilities** for careers in STEM.
- Encourage **an interdisciplinary approach** to fields relating to aerospace and aeronautics.
- Enhance **public awareness of the benefits research and exploration**.
VSGC has worked with more than 500 program partners, including all Virginia accredited colleges, universities and community colleges.
2014 Funding for Virginia Space Grant Consortium
(projected as of 4-30-15 for NASA OEPM)

NASA Space Grant Seed Funding of $575,000 is leveraged $6.85 to 1 with $2,898,349 from cash funding and $1,038,222 from in kind contributions.

Note: Fiscal year ends on August 30, 2015.
State Funding Through SCHEV

$450,000  Virginia Aerospace Science and Technology Scholars
170,000  Scholarship/Fellowships/Student Awards
75,000  State STEM Projects
$695,000  Total
VSGC Organization

Board of Directors:
Mr. John Broderick – Chair, Old Dominion University
Dr. William Harvey, Hampton University
Dr. W. Taylor Reveley, III, College of William and Mary
Dr. Teresa Sullivan, University of Virginia
Mr. Peter Blake, State Council of Higher Education for Virginia
Mr. Peter Jobse, Center for Innovative Technology
Dr. Glenn DuBois, Virginia Community College System
Dr. Timothy Sands – Virginia Tech

Advisory Council:
Representatives from each of the members.
For SCHEV: Beverly Covington, Policy Analyst for Academic Affairs and Planning

Director and Staff (19 individuals)
ODU Research Foundation is fiscal agent.
Program Areas

- Scholarships/Fellowships/Internships
- Student Research and Mission Opportunities
- Building Research Capabilities/Research Partnerships
- Workforce Development for the STEM Pipeline - K–Post Doc
- Higher Education
- Precollege – Teacher Professional Development and Student Enrichment Programs
- Public Science Literacy/Informal Science Education
Fellowships and Scholarships
VSGC Scholarships/Fellowships

Since 1989, the VSGC has awarded $6,292,628 in support to 1,509 students (including renewals) at Virginia’s Space Grant institutions.

- Undergraduate Research Scholarships -- $1,945,739 to 270 students ($8,500 award)
- Graduate Research Fellowships -- $3,774,389 to 750 students ($6,000 renewable award – University match of $6,000 to $12,000)
- Community College Scholarships -- $233,000 to 148 students ($2,000 award)
- Undergraduate STEM Bridge Scholarship -- $178,500 to 179 students ($1,000 renewable award)
- Teacher Education Scholarships -- $161,000 to 161 students (no longer available)
- Funding provided by NASA Space Grant and the Commonwealth
2015 VSGC Student Research Conference and Luncheon-April 17, 2015

- Hosted by NASA Langley Research Center (LaRC)
- Luncheon Sponsored by Virginia Tech
- Graduate Research Fellows and Undergraduate Research Scholars present their research
- Special Agenda for STEM Bridge Scholars and STEM Takes Flight Scholars
- David Bowles, LaRC Director, Luncheon Keynote Speaker
Student Flight Programs and Design Competitions
Student Flight Opportunities

- Give students hands-on experience building payloads for space environment
- Conducting meaningful science and engineering
- Students participate in rigorous flight readiness review processes
- Student participation leads to internships and job opportunities at NASA and other Aerospace companies
- VSGC has been key to supporting these programs at Space Grant universities and community colleges and for precollege projects
Student Flight Programs

- Cubesats
- Sounding rocket missions
- Microgravity experiments
- Space Station experiments
- Research balloon payloads
- Airborne experiments
- Design projects
RockOn!

- Six-day hands-on workshop held each June since 2008 for faculty and students. >280 participants to date
- Small teams build a sounding rocket payload from a kit.
- Payloads stacked and launched on a two-stage Terrier-Orion rocket on day 6. Payloads launched and retrieved.
- VSGC has sponsored teams from VT, UVA, HU and ODU.
- More sophisticated flight opportunities follow on RockSat-C and RockSat-X.
- More than 33 participating schools have integrated sounding rocket payloads into their curriculum.
• VSGC sponsors Virginia Tech Team for Wearable Technology Projects at Johnson Space Center (2013, 2014, 2015)

• Undergrads in Architecture, Computer Science, Industrial Design, Electrical and Computer Engineering
Example Projects

In-boot jetpack controller

Cargo bag radiation shielding garment

Flexible interactive cuff checklist

Noise-cancelling vest
Small Satellite Working Group

- VSGC established a Small Satellite Working Group in 2011 for networking, to plan for anticipated calls for proposals for small satellite initiatives, and to seek collaborative activities.

- Members currently include Virginia Tech, UVA, Old Dominion University, Will and Mary, Hampton University, NASA Langley and NASA Wallops.

- Highly collaborative group.
  - Sharing of information and resources
  - Awareness of flight and funding opportunities
  - Ongoing communication and quarterly meeting
  - Working together on VSGC French cubesat initiative
  - Planning for participation in Space Grant Solar Eclipse 2017 project
Internships

More than 5,000 students placed in paid internships with NASA, federal labs and industry.
A statewide one stop, centralized, highly searchable online database system

CSIIP matches undergraduate STEM students to 150+ companies throughout Virginia offering paid STEM internship positions

The online CSIIP system is FREE to use for students, companies, colleges and universities.

CSIIP works with all Virginia community colleges, colleges and universities.

CSIIP offers spring, summer, and fall internship opportunities

Offer industry work experience. Keep STEM talent in Virginia.
COMMONWEALTH STEM INDUSTRY INTERNSHIP PROGRAM

ONE APPLICATION - 150+ COMPANIES THROUGHOUT VIRGINIA
“Every expectation that I had when starting this internship has been exceeded…. I leave concretely declaring electrical engineering as my major [at Virginia Commonwealth University]…. I leave not only adding hands-on skills but knowledge of the Commonwealth Center for Advanced Manufacturing (CCAM), and their goal of joining universities and companies together in order to close the gap in the manufacturing industry for the United States. I one day want to say that I am a graduate of VCU in the field of electrical engineering and this [CSIIP] internship set me on the right path.” — Jayla Seward, STF Sponsored CSIIP intern, summer 2015

Since CSIIP launch, June 2012:

Number of active applicants: 1000+ (Evolves Daily)

Number of companies registered: 168

Number of placements: 178
Precollege
Virginia Aerospace Science and Technology Scholars (VASTS)

Program Information

• 11th Grade STEM Program, promoting STEM through NASA Space Exploration Mission Design concepts

• Online Course runs through from December through April

• Summer Academy at NASA Langley Research Center in which students design a human mission to Mars

• College Credit through TNCC is provided for both aspects of the program
  • 2 Credits for the Online Course
  • 2 Credits for the Summer Academy

• Award Winning program:
  • 2009 NASA Langley Team Achievement Award
  • 2014 Programs That Work Award from Virginia Math Science Coalition
Virginia Aerospace Science and Technology Scholars (VASTS)

- **2976 alumni** since program inception in 2008
- Longitudinal Tracking shows:
  - **95%** of tracked students have selected **STEM college majors** or now in STEM careers
  - **66%** of tracked students have selected engineering-related college majors
  - **62%** of tracked students have selected Virginia colleges and universities
- External Evaluation shows outstanding student experience ratings.

### Virginia Aerospace Science and Technology Scholars

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<thead>
<tr>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Participants</strong></td>
<td>48</td>
<td>118</td>
<td>347</td>
<td>420</td>
<td>467</td>
<td>520</td>
<td>505</td>
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<tr>
<td>Males (%)</td>
<td>77</td>
<td>68</td>
<td>68</td>
<td>67</td>
<td>65</td>
<td>62</td>
<td>62</td>
<td>64</td>
</tr>
<tr>
<td>Females (%)</td>
<td>23</td>
<td>32</td>
<td>32</td>
<td>33</td>
<td>35</td>
<td>38</td>
<td>38</td>
<td>36</td>
</tr>
<tr>
<td>Underrepresented Minorities (%)</td>
<td>11</td>
<td>18</td>
<td>18</td>
<td>14</td>
<td>14</td>
<td>24</td>
<td>17</td>
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<tr>
<td>Career and Technical Education-track Students (%)</td>
<td>30</td>
<td>30</td>
<td>32</td>
<td>36</td>
<td>32</td>
<td>38</td>
<td>32</td>
<td>39</td>
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<tr>
<td>Virginia Senate Districts Represented (%)</td>
<td>65</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<tr>
<td>Virginia House Districts Represented (%)</td>
<td>41</td>
<td>74</td>
<td>86</td>
<td>86</td>
<td>99</td>
<td>95</td>
<td>93</td>
<td>94</td>
</tr>
</tbody>
</table>

*Self Reported. Up to 12% of students have indicated "Other"*
VSCS is a two aspect program featuring engaging STEM activities based around the exciting missions of NASA’s Wallops Flight Facility on Virginia’s Eastern Shore

**Online Course**
- Competitive program for high school sophomores statewide
- Free of cost
- 10 week online course studying NASA’s scientific missions guided by Virginia Master Teachers

**Summer Academy**
- One week at NASA Wallops Flight Facility
- Students work with NASA Wallops Engineers and Scientists on mission designs

*Winner of a 2015 Virginia Math Science Coalition Programs That Work Award*
Impact: Over 700 Total Participants in VSCS Online Course and 218 Participants in Summer Academy at Wallops Flight Facility

<table>
<thead>
<tr>
<th>Total Participants</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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</thead>
<tbody>
<tr>
<td>Males (%)</td>
<td>141</td>
<td>254</td>
<td>315</td>
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<tr>
<td>Females (%)</td>
<td>37%</td>
<td>37%</td>
<td>40%</td>
</tr>
<tr>
<td>Underrepresented Minorities (%)*</td>
<td>32%</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>Career and Technical Education-track Students</td>
<td>22%</td>
<td>29%</td>
<td>33%</td>
</tr>
<tr>
<td>Virginia Senate Districts Represented (%)</td>
<td>61%</td>
<td>95%</td>
<td>98%</td>
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<tr>
<td>Virginia House Districts Represented (%)</td>
<td>78%</td>
<td>80%</td>
<td>86%</td>
</tr>
</tbody>
</table>

* Self reported; up to 5% of students typically indicate "other"

<table>
<thead>
<tr>
<th>Summer Participants</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males (%)</td>
<td>40</td>
<td>90</td>
<td>88</td>
</tr>
<tr>
<td>Females (%)</td>
<td>60%</td>
<td>54%</td>
<td>47%</td>
</tr>
<tr>
<td>Underrepresented Minorities (%)*</td>
<td>23%</td>
<td>11%</td>
<td>16%</td>
</tr>
<tr>
<td>Career and Technical Education-track Students</td>
<td>15%</td>
<td>21%</td>
<td>33%</td>
</tr>
<tr>
<td>Virginia Senate Districts Represented (%)</td>
<td>55%</td>
<td>80%</td>
<td>75%</td>
</tr>
<tr>
<td>Virginia House Districts Represented (%)</td>
<td>32%</td>
<td>53%</td>
<td>49%</td>
</tr>
</tbody>
</table>

* Self reported; up to 5% of students typically indicate "other"
On-line Earth System Science Course engaging students in NASA research and data

- Competitive program for high school juniors and seniors statewide.
- **Free of cost** to students.
- 3 college credits offered through TNCC.
  - TNCC Course Code: Geology 195
- Students will study Earth System Science and work with NASA data.
- Students will work online with Virginia Master Teachers.
- Analysis of real world data will be emphasized.
- Technical Report writing will be an important course focus.
- First offering Spring Semester 2016.
Partnership between Virginia Space Grant Consortium, Commonwealth of Virginia, Virginia Tech and University of Virginia

Statewide program consists of a three-day, on-campus residential experience for rising 9th and 10th grade students.

240 students selected for summer 2015.
- Applicant pool of 1,370.
- Three sessions in summer 2015:
  - VT - July 12-15
  - UVA – July 26-29
  - UVA – August 2-5

Provided free of charge to students thanks to state funding.

STEM activities focused on solving engineering challenges and scientific questions.

632 participants since program inception in 2013.
MY FAVORITE THING ABOUT BLAST WAS...

- learning how to think outside the box
- discovering more about college and STEM than ever before
- making new friends
- meeting new people
- a great experience
- finding unexpected solutions to STEM problems
- being with people with similar interests
- learned that I really love science
- See what college is really like
- pretty much everything
- the challenges
- the food
- tours

BLAST has changed my interests into STEM
Funding requested through SCHEV budget to expand the program to two more sessions of 80 students each (total 160).
- $151,200 per year
- Old Dominion University expected to be added as a university site.

BLAST contributes to SCHEV Framework:

Goal 1: Provide Affordable Access for All.
   Objective: Expand outreach to PK-12 and traditionally underserved populations.

Goal 4: Advancing the Economic and Cultural Prosperity of the Commonwealth and Its Regions (Because of its extensive statewide reach).
   Objective: Build a competitive, future-ready workforce for all regions.
● Engineering Technology Exploratory Saturday Series.

● Middle-School Students and Parents.

● Goals:
  • Motivate students toward careers in engineering technology and information technology
  • Provide hands-on experiences and activities
  • Exposure to real engineering technologists as role models
  • Inform parents about careers in STEM
• Series Includes Three Themed Saturday Events.
  • Designing the Future (hosted by TNCC)
  • Connecting the Future (hosted by Canon Virginia)
  • Automating the Future (hosted by NASA Langley Research Center)

• Hosted by: Thomas Nelson Community College, Canon-Virginia, and NASA Langley Research Center

• Since 2008, 27 Saturdays offered.
• 1723 students and 1478 parents have participated.
• GPGSA partners have contributed significant cash and in-kind support to enable events.
Competitive NASA Space Grant Award - $499,155

STEM Takes Flight Program Goals

• To foster enhanced community college retention in STEM academic tracks through graduation or transfer to a four-year institution.
• To strengthen VSGC’s relationships with and build NASA linkages with Virginia’s community colleges.

Six Components

• Community College STEM Bridge Scholarship
• Industry Internships – CSIIP
• Build/Fly/Learn NASA Research Experiences (Team and Individual)
• New Courses (2)
• Faculty Workshop
Partners

- Virginia Community College System (VCCS)
- NASA Langley Research Center
- NASA Wallops Flight Facility
- Eastern Shore Community College
- Virginia Western Community College
- Thomas Nelson Community College
- Strong Support from the Governor’s Office
Community College STEM Bridge Scholarship

- $5,000 scholarship ($2k year one; $3k year two)
- Freshman students majoring in STEM (at least 9 hours)
- Students seeking Bachelors or Associates degrees
- Transition to Workforce or Transfer Students
- 16 scholarships were awarded

Industry Internships

- Through VSGC’s Commonwealth STEM Industry Internship Program (CSIIP)
- One-stop, centralized online application system with 150+ companies
- Funding for 10 additional community college students ($5k per student)
- Fall, spring or summer placements
  - Sophomore through recently graduated students; enrolled in at least 6 credit hours
- Reinforce the value of community college students to employers
Build/Fly/Learn NASA Research Experiences (Team and Individual)

- Four, three-student teams for research at NASA Langley
  - Design, development and test payload elements, test articles or systems
- 7 Individual Student Researchers at NASA Langley and Wallops
  - Projects will maximize hands-on engagement of students at critical project stages (Ex. -Orion SPLASH, THOR, Sea Level Rise)
- $5,000 stipend for 40 hours/week 10-week summer period
- Work Directly with NASA Mentors as Guest Researchers
- Poster Session and Technical Paper Required
- 24 placements in summer 2015

Faculty Workshop at Wallops Flight Facility

- 20 Community College Faculty – June
- 21st Century Workforce Skills
- Teambuilding and Simulations
Space/Payload Design Courses at Eastern Shore Community College

- Two New Courses Developed by Eastern Shore Community College
- Engage Students in Mission Development and Planning for a Suborbital Sounding Rocket Mission, RockSat-C
- MEC 195 Topics in Space/Payload Design I in fall semester 2015
- MEC 295 Topics in Space/Payload Design II in spring 2016
- Involve students in all aspects of the planning, design and review process for a science and engineering payload
- Launch in June 2016 from NASA Wallops
Sea Level Rise Service Learning Course

- New Online Course With a Service Learning Component
  - Co-Developed by Virginia Western Community College and Thomas Nelson Community College
- Offered to 15 Students Attending any Virginia Community College
- Partnership with NASA Wallops for Service Learning
  - ODU’s Mitigation and Adaptation Research Institute (MARI)
- Faculty-led Student Teams Working with NASA Scientists
- Assess Sea Level Rise and Impacts to Coastal Communities and Ecosystems. Use GIS Technologies and Datasets
- Model various sea level rise scenarios and gauge their impacts to NASA Wallops infrastructure and habitat.

Offered in Spring 2016
GRADUATE RESEARCH AWARDS
For Applied Research in Public-Sector Airport-Related Aviation Issues

Airport Cooperative Research Program (ACRP)

AWARDS:
- Up to 10 awards of $10,000 each for one year.
- Sponsored by U.S. DOT Federal Aviation Administration, administered by the Transportation Research Board's ACRP and managed by Virginia Space Grant Consortium.

RECOGNITION:
- Winners present final research papers at Transportation Research Board Annual Meeting.
- Papers are considered for publication as part of the Compendium of Papers for the meeting, and considered for publication in the Transportation Research Record.

INQUIRIES DIRECTED TO:
Virginia Space Grant Consortium - ACRP (E-mail is preferable)
(571) 266-4210

APPLICATION REQUIREMENTS:
- Cover Page Form from Sponsored Program Office
- Electronic plus 1 hard copy Submission
- 2 Letters of Recommendation
- Research Advisor Statement
- Official Transcripts
- Research Proposal
- Writing Sample

ELIGIBILITY:
- Open to students who are U.S. or Canadian citizens, permanent residents, or current student visa holders.
- Must be enrolled full-time in a graduate degree program at an accredited institution of higher learning during the 2014-2015 academic year.

APPLICATION DEADLINE:
May 15, 2015

For more information and to find out how to apply, please visit: http://www.trb.org/ACRP/ACRPGraduateAwardProgram.aspx

Programs for the National Academies

Airport Cooperative Research Program
University Design Competition for Addressing Airport Needs
2014 – 2015 Academic Year

Introduction

The Airport Cooperative Research Program (ACRP) is sponsoring an international competition for universities that engages students in addressing issues relating to airports and the National Airspace System. This Competition challenges individual and teams of undergraduate and/or graduate students working with faculty advisors to consider innovative approaches related to these challenges. Submitters should design solutions that focus on addressing airport issues and constraints involving the following issues: administration, environment, legal, airport-established policy, planning, safety, human resources, design, construction, maintenance, and operations at airports, and develop innovative approaches to improve the management, safety, capacity and efficiency of the nation's airports.

This Competition focuses on design solutions addressing the above issues in the following broad areas: Airport Operation and Maintenance, Runway Safety/Runway Incursions/Runway Excursions, Airport Environmental Interactions, and Airport Management and Planning. Background and some specific challenge areas are defined in the Technical Design Challenges section. Students are not limited to the suggested topical areas listed. They are free to propose design solutions based on other topics that fit the four broad challenge areas. As part of the required literature review, participants are encouraged to explore past ACRP research reports to see what ideas have already been presented and studied.

Competition Goals:

1. Raise awareness of the benefits of the Airport Cooperative Research Program and the importance of airports to the National Airspace System infrastructure.
2. Increase the involvement of the academic community in ACRP and addressing airport operations and infrastructure issues and needs.
3. Engage students at U.S. colleges and universities in the conceptualization of applications, systems and equipment capable of addressing related challenges in a robust, reliable and comprehensive manner.
4. Encourage undergraduate and graduate students at U.S. colleges and universities to contribute innovative ideas and solutions to issues facing airports and the National Airspace System.
5. Provide a framework and incentives for quality educational experiences for university students.
6. Develop an awareness of and an interest in airports as vital and interesting areas for engineering and technology careers.

The Competition website is the participant’s source for complete and up-to-date information: vsge.edu/ACRPDesignCompetition
Geospatial Technology

- Established the Virginia Geospatial Extension Program at Virginia Tech through a NASA Workforce Development Grant.
  - Virginia Geospatial Extension Agent, Dr. John McGee, is now a tenure-track faculty in the College of Natural Resources

- Three NSF-Advanced Technology Education grants in partnership with Virginia Tech and Virginia’s Community Colleges (GeoTEd)
  - Workforce Needs Analysis; Faculty Institutes
  - High School Teacher Workshops; Mobile apps; Career Awareness.

- GEOTREK-12 program provides precollege teachers with training and support to implement geospatial technologies in the classroom
  - Trained over 750 teachers since 2000

- Distinguished Geospatial Education Partner Award from the National GeoTECH Center (National Geospatial Technology Center of Excellence)
Geospatial Technology

● Managed NASA Langley’s GIS Internship Program from 2008-2011
  • National recruitment for full and part-time internships year round
  • Students mentored by Mary Gainer
  • Some support for JPL and Marshall
  • Placed nearly 100 interns in paid positions – Many from Virginia Tech

● VSGC GEOTREK-12 program provides precollege teachers with training and support to implement geospatial technologies in the classroom
  • Trained over 750 teachers since 2000
Precollege Teacher Professional Development

- Trained more than 25,000 educators.
- All Virginia School Systems.
- Standards-based and strong evaluation component.
- Integrative STEM Education; Engineering Design Process; NASA-inspired content; Robotics; Earth Systems Science; Geospatial Technology; Human Exploration.
Integrative STEM for Pre-service Teachers (inSTEP)

NASA-sponsored Pre-service Teacher Program

32 pre-service teachers from 14 different institutions in Virginia

4 Main Components

Content
Earth Systems Science plus Behavior Intervention and Support

Mentorship
5 Master Teachers

Practice
Extended Day serving at-risk students

Professional Development
Both online and face-to-face professional development
Faculty Programs

New Investigator awards, funding for conference travel and new course development
New Investigator Program

- Designed to strengthen Virginia’s aerospace-related infrastructure by providing start-up funding to university faculty who are conducting research aligned with NASA’s mission.

- To date, $280,000 awarded to 28 faculty members.
  - $10,000 per investigator
  - Program inception, 2009

- Targeted to tenure track faculty within first five years of academic career.

Seth Aubin (R), Assistant Professor of Physics at the College of William & Mary, graduate students Megan Ivory (L) and Austin Ziltz.
# New Investigator Program 2015-2016

## Faculty Awardees

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Department</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joshua J. Choi</td>
<td>UVA</td>
<td>Chemical Engineering</td>
<td>Solar Aviation with High-Performance, Low-weight and Flexible Perovskite Solar Cells</td>
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<tr>
<td>Daniel Foster</td>
<td>ODU</td>
<td>Mechanical and Aerospace Engineering</td>
<td>Process Monitoring of Ultrasonic Additive Manufacturing</td>
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<tr>
<td>Luke Juran</td>
<td>VT</td>
<td>Department of Geography</td>
<td>Development and Application of a Multiscalar Water Security Index</td>
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<tr>
<td>Otilia Popescu</td>
<td>ODU</td>
<td>Department of Engineering Technology</td>
<td>Software Defined Radios for Small Satellite Communications</td>
</tr>
<tr>
<td>Bhuvana Srinivasan</td>
<td>VT</td>
<td>Aerospace and Ocean Engineering</td>
<td>Theoretical and Numerical Studies of Plasma Separation from Magnetic Nozzles</td>
</tr>
</tbody>
</table>
VSGC Recent Recognition

● Programs That Work Award from Virginia Math Science Coalition for Technology Exploratory Saturdays - 2015

● Programs That Work Award from Virginia Math Science Coalition for Virginia Aerospace Science and Technology Scholars (VASTS) - 2015

● Distinguished Geospatial Education Partner Award from the National GeoTECH Center for Geospatial Technician Education Through Virginia’s Community Colleges (GeoTED) - 2015

● Programs That Work Award from Virginia Math Science for Virginia Aerospace Science and Technology Scholars - 2014

● NASA Group Achievement Award for Langley Aerospace Research Summer Scholars (LARSS) Program - 2014

● NASA Robert H. Goddard Award for Virginia Space Coast Scholars - 2014
VSGC Offers

- Strong track record of outstanding program management and impacts.
- Long history of partnerships with NASA, particularly Langley, Wallops and Headquarters, academia and industry.
- Existing Small Sat Working Group.
- Engagement with national Space Grant network.
- Educational nonprofit with highly leveraged resources.
- A mission of educational outreach, workforce development and research directly aligned to NASA’s mission and strategic plan.
- Open to and experienced in partnerships across institutions and organizations.
- Extensive aerospace, workforce development and education networks
- Extensive experience in student flight programs, workforce development programs, teacher professional development, higher education and precollege programs.