Revitalization and Growth of the SEDS Student Organization at SDSM&T

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Outline

- SEDS Revitalization
- Professional Activities
- Campus Activities
- Outreach Activities
- Projects
- Financial Summary
- Career Opportunities
- Conclusions

SEDS Revitalization

- Students for the Exploration and Development of Space
- Dates back to ~2007 timeframe at SDSM&T
- Chapter went dormant for a couple years
- SDSGC Project Innovation Grant awarded in 2011 to reform chapter
- Bring together students with similar aerospace-related interests
- Provide space-related activities and experience for aerospace careers

SpaceVision Conference

- Opportunity to network with and learn from industry leaders
- Above: 2011 in Boulder, CO (12 students)
- 2012 in Buffalo, NY (3 students)
- Left: 2013 in Phoenix, AZ (7 students)
- Keynote: Bill Nye (2011 and 2013)
- 2014 at the University of North Carolina (Plan for 8 students to participate)

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Campus Activities

- Student Organization Fair
- Adventure Weekend: Stars and Rockets
- M-Week Parade
- Hidden Valley Observatory
- Movie Night: October Sky
- Frontier Astronautics Tour
- Dr. Teet's Celestial Mechanics Class

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Outreach Activities

- Career Launch Presentation (High School)
- E-Week Star Lab (Middle School)
- LEGO Mindstorm Robots (Middle School and Boy Scouts)
- NASA College Fair for FIRST Robotics Participants (High School)

E-Week Star Lab

NASA College Fair
Kennedy Space Center 2014

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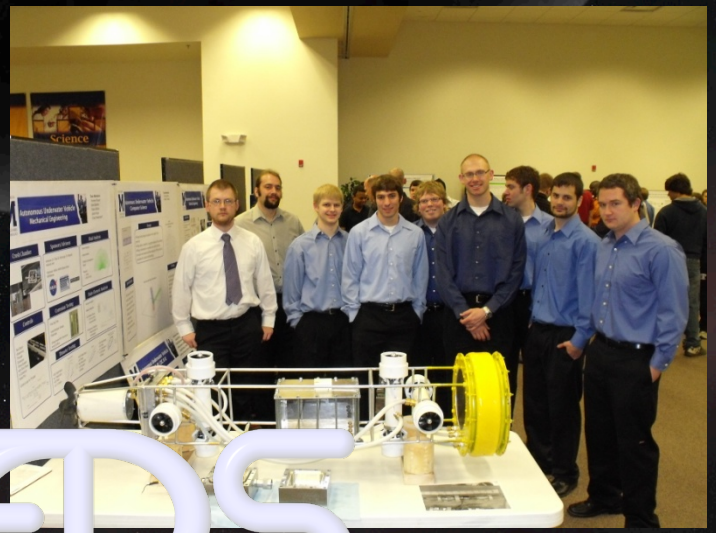
Projects

- NASA Robotic Mining Competition
  - SDSM&T Moonrockers
  - Have placed 4th, 11th, 16th, and 22nd
- Mines Association of Rocketeers
  - Rocket team formed 2013-2014
  - Goal to participate in IREC 2015
- Autonomous Underwater Vehicle



SDSM&T Moonrockers

- NASA Robotic Mining Competition takes place at the Kennedy Space Center each year in May
- Cape Canaveral AFS Tour
- Atlas V Rocket Launch
- Saturn V and Atlantis Tours
- Alumni visits

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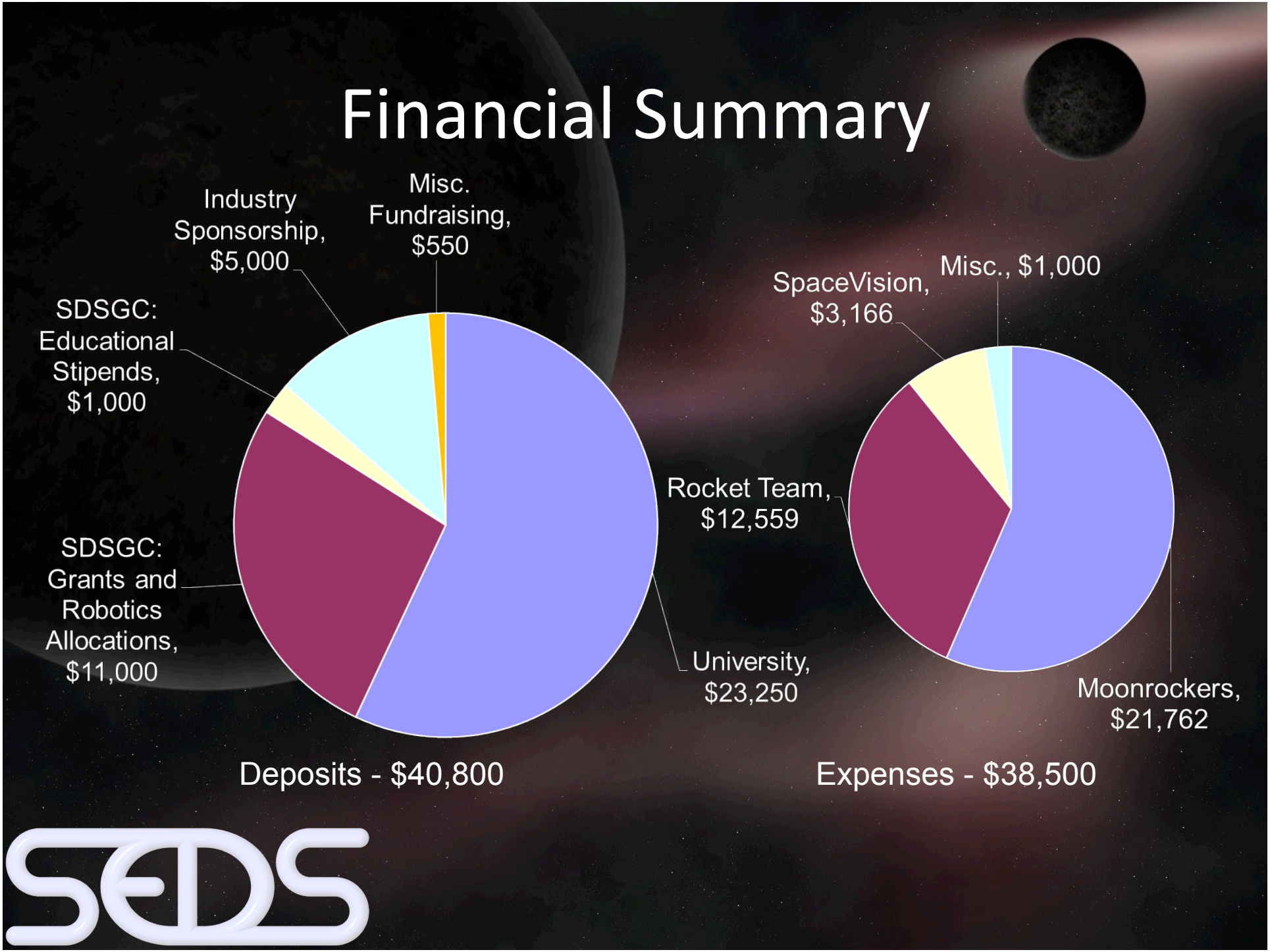
Financial Summary



Career Opportunities for SEDS Students

- Travis Davis* (NASA Marshall Space Flight Center)
- Stephen Galik (XCOR Aerospace)
- Ted Goltz (Electroimpact)
- Jesse Hinricher* (NASA KSC Internship)
- Anthony Kulesa* (NASA STRF/KSC)
- Carly Sandin* (NASA JSC & Boeing Internships)
- Levi Shoenrock (Lockheed Martin Space Systems)
- Shea Thorson* (NASA JSC)
- John Ziadat* (SpaceX Internship)

*Space Grant Fellow

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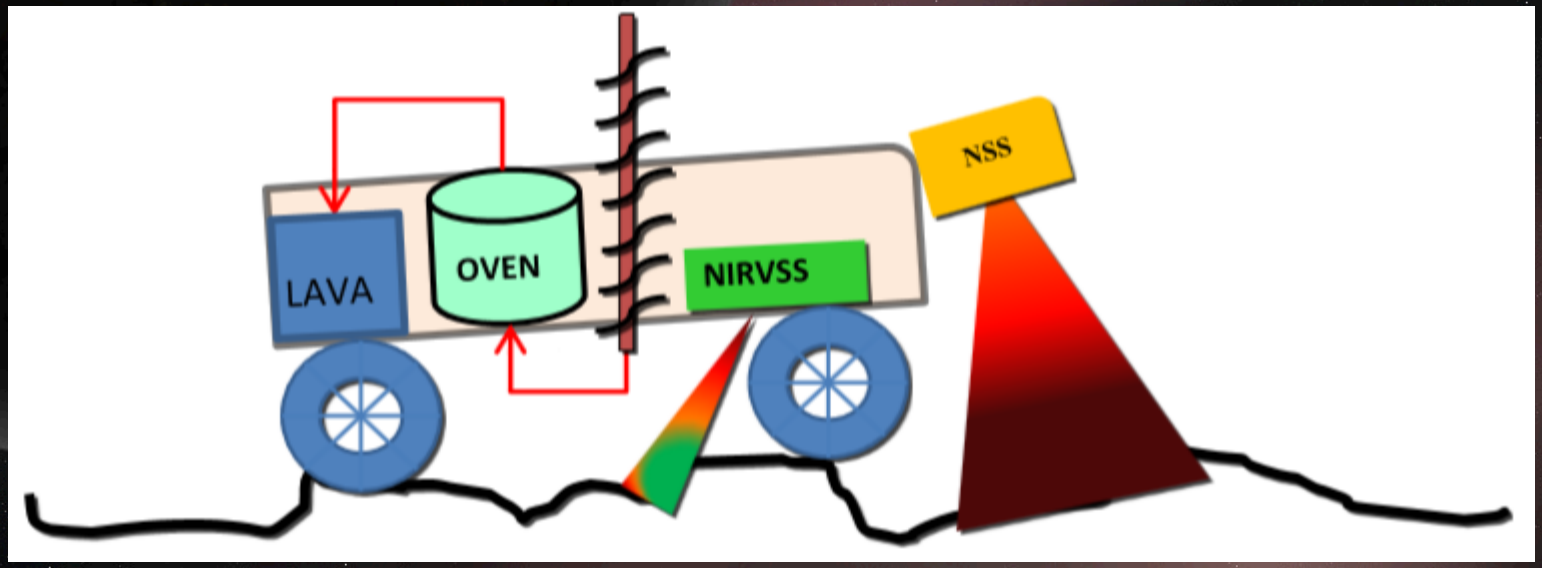
NASA Internship – KSC

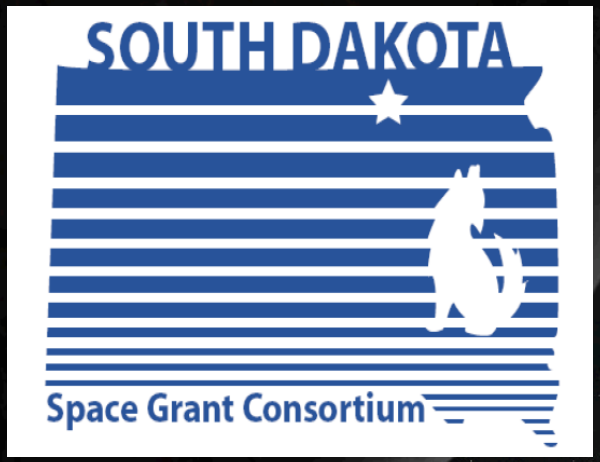
- In-Situ Resource Utilization (ISRU)
  - Search for Water in Lunar Regolith
- Rover



Conclusions

- Active participation across majors/class levels
- Support from SDSGC, university, industry
- Multiple space-related activities held
- Outreach activities for the next generation
- Numerous members entering aerospace field
- SDSM&T SEDS recognized by SD BOR for Organizational Leadership (2014)

Thank You



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Questions?