

April 29, 2022



Spring 2022 Recognition of Graduates



Dr. Robert A. Frederick, Jr.

PRC Director

Professor of Mechanical and Aerospace Engineering

April 29, 2022







Spring 2022 PRC Graduate Recognition Program

Welcome

Dr. Robert Frederick, PRC Director

Recognition of Alumni at 30th Anniversary

Celebrating our Alumni Banquet

Propulsion Research Symposium

Cookout at the Lab

Recognition of Graduates

Ph.D. Student

Master's Students

Undergraduate Students





Recognition of UAH Alumni Speakers at our 30th Anniversary Banquet



Dayna Ise, BSME 1999 NASA MSFC



Michelle Christensen, BS MAE 2006, Blue Origin



MIke Wicks, MSME 1993 Diakonos Research



Dr. Chris Brophy, PhD 1997, Naval Postgraduate School



Tryshandra Moton, MS AE 2001 NASA GSFC



Dr. Kent Chojnacki, PhD 1993 NASA MSFC



Alumni with Advanced Degrees 🚑







Alumni with BS Degrees







Propulsion Symposium









Cookout/Tours at the Lab













Doctoral Graduate





Dr. Behzad Bahrami Babamiri Bookan, Iran

Advisors: Dr. Kavan Hazelli and Dr. Jason Mayeu



Masters' Graduates





Nagarajan Nageshwar Tamil Nadu, India

Advisor: Dr. Gabe Xu

Nageshwar is planning to continue into a Ph.D.



Masters' Graduates





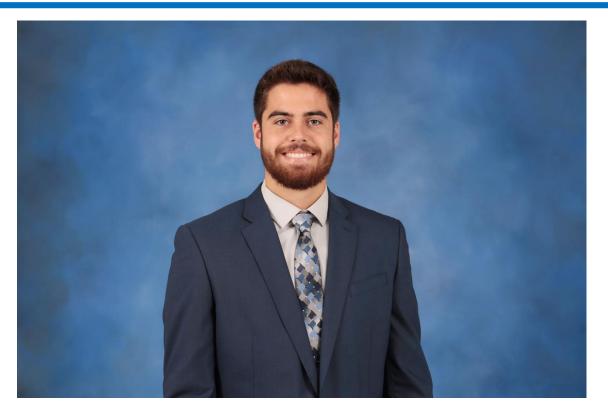
Isabeta Rountree Louisville, KY

Advisor: Dr. Dale Thomas

Isabeta is planning to continue her work as the Mars Ascent Vehicle MBSE lead while helping with implementation of MBSE at MSFC.







Callahan Diercks

Loves Park, IL

Mentor: Dr. David Lineberry

Callahan is planning to stay in Huntsville seeking a career in Mechanical Engineering.







Caleb Knox
Trussville, AL

Mentor: Dr. Phil Ligrani

Caleb is planning to work as a Test Engineer in the Huntsville area.







Morgan Aldrich Bloomington, IL

Mentors: Dr. Robert Frederick and Paige Berg

Morgan accepted a job as an Associate Design Engineer with Aerojet Rocketdyne at their Huntsville office.







Manvith Amara Charlotte, NC

Honors Project Mentor: Dr. David Lineberry

Manvith is planning to work as an Aerospace Engineer in the Huntsville Area.







Declan Brick
Fayetteville, Arkansas

Mentor: Dr. Gabe Xu

Declan will be attending University of Michigan to do a PhD in computational modeling of electric propulsion.







Logan Curtis

Mentor: Dr. Jason Cassibry

Logan is looking for a permanent job preferably in the Huntsville area and he's also considering graduate school."





Bennett Hasner Louisville, KY

Mentor: Dr. Jason Cassibry

Bennett is planning to work in the propulsion field in the Huntsville area and will continue to do work with Dr. Cassibry even in his full-time career.







Neil Laya

Mentor: Dr. Gabe Xu

Neil is planning to continue to graduate school at UAH working with Dr. Xu and studying magnetic reconnection space propulsion.







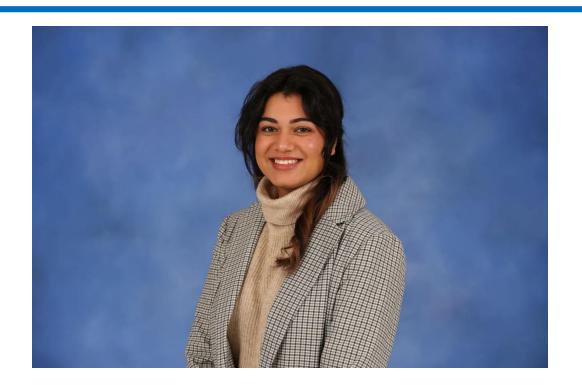
Jacob Lee *Huntsville, AL*

Mentor: Dr. Gang Wang

Jacob will be starting a job at Space and Missile Defense Command after graduation.







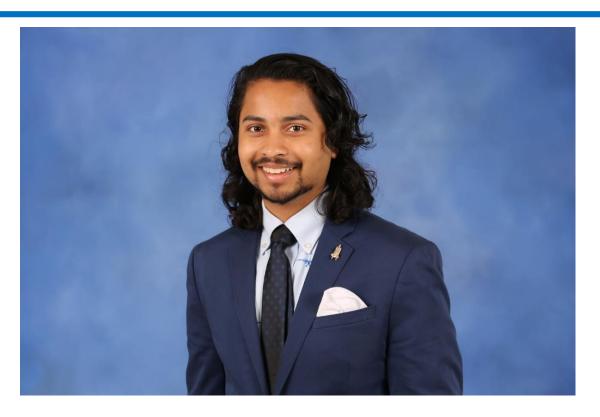
Shivani Patel Lebanon, TN

Mentors: Dr. Dale Thomas and Dr. David Lineberry

Shivani will be working at Dynetics within their Systems Engineering department.







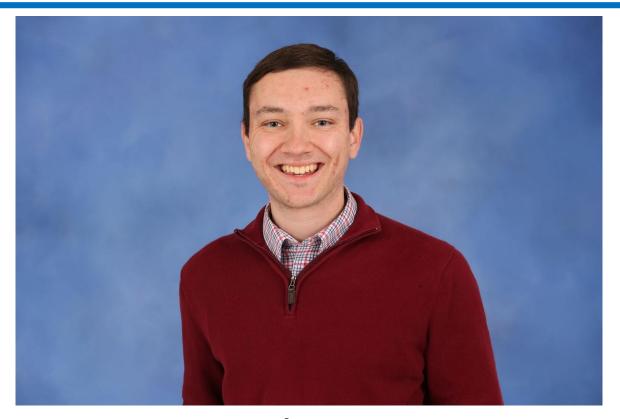
Alay Shah
South Riding, VA

Mentor: Dr. Dale Thomas

Logan is looking for a permanent job preferably in the Huntsville area and he's also considering graduate school."







Brandon Staton Russell, KY

Mentor: Dr. Jason Cassibry

Brandon accepted a job at Corvid doing missile defense analysis.







Shelby Westrich
Crab Orchard, IL

Mentor: Dr. Jason Cassibry

Shelby accepted an offer to work for Jacobs Space Exploration Group as a Solid Rocket Motor Test Engineer at NASA Marshall Space Flight Center. She plans to pursue a graduate degree part-time in Aerospace Systems Engineering at UAH







Jordan Willoughby Fort Payne, AL

Mentor: Dr. James Blackmon

Jordan is planning to pursue an aerospace engineering career in the Huntsville area and continue his education through a graduate school program.







Charles Wilson Jasper, AL

Mentor: Dr. Phil Ligrani

Charles has accepted an offer from Boeing with the BCA engineering team.







2022 UAH SLI Team

Instructor: Dr. David Lineberry, Mentors: Jason Winningham and Dr. Amit Patel

Manvith Amara, Madelynne Bell, Declan Brick, Adam Garret, Tyler Gas, Brennan Haralson, Alex Herbst, Leela Hyatt, Tanner Jackson, Neil Laya, Allison Lentz, Sophia Matthews, Joshua Newton, Shivani Patel, Justin Philips, Jaden Reid, Jason Riebe, Spencer Rubottom, Hunter Silverstrim, Dalton Sloan, Shelby Westrich, Jordan Willoughby



Evan Unruh Receives Director's "Hard Charger" Award.





Dr. Clark Hawk, our founding Director, used to give at his discretion something called the Hard Charger Award. It was a special recognition for a job well done. Tonight I am pleased to reinstate that practice by recognizing Evan Unruh with a PRC Director's Hard Charger Award. Evan completed a Bachelor's at UAH and a Master's Degree in 2021. During the pandemic he designed, built, and tested UAH's first rotating detonation engine. This demonstration was a key element enabling Dr. Gabe Xu and his team to win a 1.5 Million research award from Texas A&M supporting RDE's for hypersonics.

Evan was also a utility infielder in the PRC labs with Dr. Lineberry and Tony on rocket engine testing, torpedo combustor testing, and student projects. Also during the pandemic, he was my grader for Rocket Propulsion where he helped me roll out a new online version of this class, with a new book, and new homework problems for 100 students, 100% online. He worked out and typed out dozens of homework and test solutions. He also was a Teaching Assistant in our rocket design class. Dr. Frederick said, "I am not sure I would have made it through the pandemic without his assistance. And I must say that Aerojet Rocketdyne has made a wonderful catch to bring him onboard."





PRC 30 Years and Beyond

PRC 30th Anniversary Metrics

– 300 Students Receiving Advanced Degrees (10 per year)

– \$60 Million In External Funding (2 million/year, \$200K/graduate)

- 438 Refereed Journal Article (15 per year)
 - 1,400 Students Through Propulsion Class (47 per year)

PRC 30th Anniversary Vision Forward

Continuing a legacy of excellence in traditional student production in the propulsion arena

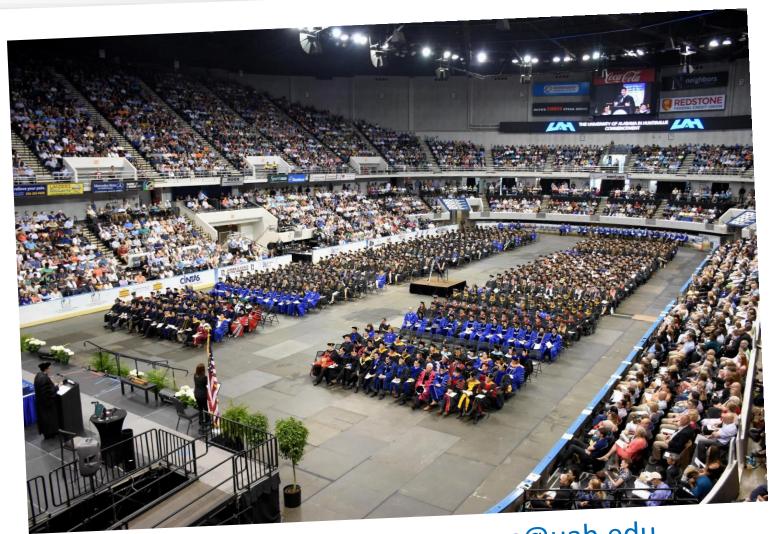
Equipping the future workforce for success in their professional careers

■ Networking with alumni to develop partnerships on research projects and workforce development





UAH Commencement, Monday



Email you Commencement Photos to prc@uah.edu



Update on Staschus Scholarship





PROPULSION RESEARCH CENTER

CLAIRE-ISABELLE STASCHUS MEMORIAL SCHOLARSHIP

"Your gift to the Staschus Scholarship is an investment in the future of propulsion research by supporting the talented and dedicated students of the PRC."

> -Robert Frederick, Ph.D. PRC Director



CLAIRE'S LEGACY

The Claire-Isabelle Staschus Memorial Scholarship was started in 2017 after Claire passed away. This scholarship creates a legacy for Claire that symbolizes her love for learning, passion for propulsion, and eagerness to excel.

This scholarship will provide financial support to students in perpetuity, allowing UAH to honor Claire's impact on engineering at UAH for years to come. Specifically, it will benefit an undergraduate or graduate student pursuing a degree in Mechanical and/or Aerospace Engineering with an interest in propulsion.

PROPEL THE FUTURE

With a goal of \$25,000 to endow this fund as a scholarship by the end of 2022, gifts of all sizes move us closer and ensure continuous support year after year. Your donation will help students who embody Claire's spirit of academic excellence and achievement.

WAYS TO GIVE

By credit card at uah.edu/givetoprc

By check made payable to **UAH Foundation**, memo line: Staschus scholarship.

Mail to: UAH Office of Development SKH Third Floor 301 Sparkman Drive Huntsville, AL 35899



Goal: 50% by May 1

Actual: 66%

Thank you to our alumni, faculty, staff, friends, and students who have contributed!

Final Goal: 100% by December 31

uah.edu/givetoprc









Special Thanks



- PRC Staff and Associated Faculty
- MAE Department, Keith Hollingsworth
- UAH Leadership, Dr. John Christy, V.P. Research
- Parents, Grandparents of Graduates
- Brothers and Sisters of Graduates
- Spouses of Graduates
- Friends of Graduates
- Guests



2011 SLI Team, at Wallops Island VA



