



Name: Panagiotis (Panos) Vitsas

Hometown:
Agrinio, Greece

Education:
Diploma in Aeronautical Engineering (University of Patras, Greece)
MSc in Human Factors and Safety Assessment in Aeronautics (Cranfield University, UK)
PhD in Computational Aerodynamics and Aeroacoustics (University of Patras, Greece)
Flight Test Diploma (International Test Pilot School [ITPS], Canada)
Employer:
International Test Pilot School (ITPS Canada)

Job Description:
I am a Flight Test Engineer Instructor at ITPS Canada. We train military and civilian pilots and engineers on flight test techniques and certification for a wide range of aircraft. I deliver academic lectures in various subjects including aircraft performance, flying qualities and data analysis. I also fly on various types of aircraft to train the crews or collect flight test data.

As a kid, what did you want to be when you “grew up”?
Aeronautical Engineer, Pilot, Astronaut.

How far can YOU see? Where do you see the aerospace industry 10–20 years from now?
The aircraft crew will be minimized and unmanned vehicles will be taking over the sky. New propulsion technologies will reduce aircraft emissions and noise drastically. Commercial suborbital spaceflights will increase.

One insightful fact you want everyone to know:
Never get dismayed. The greatest achievements came right after the greatest difficulties.

Professional Interests:
Dynamic flight test techniques, aircraft design and modifications, spinning.

Hobbies:
Flying private aircraft, paragliding, fitness training.



Name: Jawanza Bassue

Hometown:
Basseterre, St. Kitts & Nevis (Caribbean)

Currently Lives in:
Norman, OK

Education:

B.S. Aerospace Engineering, University of Oklahoma
M.S. Candidate 2017 Aerospace Engineering, University of Oklahoma

Employer:
Bergey Aerospace Student/Intern – University of Oklahoma

Job Description:

Design engineer for Bergey WindPower & Bergey Aerospace engineering solutions to green-energy challenges and spearheading the design of a High Altitude Record/Research Aircraft with Piper Cherokee designer Karl Bergey.

As a kid, what did you want to be when you “grew up”?

One word: Pilot! I’ve always been fascinated with airplanes, as many of my AIAA colleagues were. Somewhere along the line I fell in love with science and art and used that to drive me toward aerospace engineering.

How far can YOU see? Where do you see the aerospace industry 10–20 years from now?

I hope to see a powerful resurgence in the general aviation industry as I continue to learn about the past and plan for the future. Having a mentor like Karl Bergey allows me to fully understand where aviation has come (proverbial ups and downs) over the past 50+ years. Ten years from now it would be amazing to see improvements in the range and feasibility of electric aircraft, improved integration of unmanned systems in airspace and the excitement of flight and space travel put back in the American people (begins with improvements in education and community involvement).

One insightful fact you want everyone to know:

Everyone's reality is different – what's normal for you might be completely unusual to someone else.

Professional Interests:

Aerodynamics, engineering design & analysis, systems engineering and customer relations.

Currently preparing my resume for gainful employment at my top choice companies (including Gulfstream, Boeing, Cirrus, Piper, Icon...).

Hobbies:

Playing music, photography, automotive & aviation clubs.



Name: Brandon Stiltner

Hometown:

Grundy, VA

Currently Lives in:

Huntsville, AL

Education:

B.S. in Aerospace Engineering, Virginia Tech 2007

M.S. in Aerospace Engineering, Virginia Tech 2011

Employer:

Qualis Corporation

Job Description:

GNC Engineer working on SLS and Cubesats at NASA Marshall Space Flight Center.

As a kid, what did you want to be when you "grew up"?

Astronaut, paleontologist, fighter pilot, and professional snowboarder (among others). My answer depended on the day you asked me.

How far can YOU see? Where do you see the aerospace industry 10–20 years from now?

In astronautics, I see the first manned trip to Mars, possibly including an expedition to the Martian surface. I see deep space habitats that simulate gravity using centrifugal force. I see a renewed interest in exploring the moon, with more human expeditions to the lunar surface, and a multi-national lunar surface outpost. In aeronautics, I see exponential growth of UAVs in American and global airspace. Swarms of UAVs farming, fighting forest fires, delivering mail/packages, remote search and rescue, traffic monitoring, and so much more. And new battery technologies will enable “nano” UAVs to move beyond the R&D lab.

One insightful fact you want everyone to know:

Failure IS an option during engineering design and test phases. Each failure is an opportunity to learn and improve.

Professional Interests:

Orbital mechanics, control engineering, Cubesats, structural dynamics, and solar sails.

Hobbies:

RC aircraft and rocketry, playing guitar, snowboarding, fishing, learning, and tinkering.

https://www.aiaa.org/images/default-source/uploadedimages/aiaa-news/anjan-chakrabarty?sfvrsn=424d95db_0&download=true

Name: Anjan Chakrabarty

Hometown

Kolkata, India

Currently lives in

Fremont, CA, USA

Education

PhD in Aerospace Engineering, Pennsylvania State University, 2014

Employer

NASA Ames Research Center (SGT, Inc.)

Job Description

Dr. Chakrabarty is working on several UAV autonomy projects at Ames Research Center. He is the Principal Investigator for the DELIVER (Design Environment for Novel Vertical Lift Vehicles) Autonomy at Ames project, which investigates the effect of autonomy on the design of unmanned air vehicles (UAVs). He is working on designing small UAVs for Search and Track applications. He is also working on implementing advanced controller on-board an UAV for manipulating tasks.

As a kid, what did you want to be when you “grew up”?

Astronaut... who doesn't want to go to the moo?. We live in an era when humans will land on Mars.

How far can YOU see?

I see a connected world in the future. The last decade has connected us virtually through the Internet. The next few decades will be about mobility. The air-space will be utilized in ways never imagined before, through drones, through flying cars. Autonomous flying vehicles will change the way humans move and interact with others.

One insightful fact you want everyone to know:
Every failure is an opportunity.

Professional Interests:

UAVs, Autonomy, Control, Machine Learning

Hobbies:

Flying UAVs, painting, photography



Name: Naveen Vetcha

Hometown

Khammam, India

Currently lives in

Huntsville, AL, USA

Education

B.E. in Mechanical Engineering, Osmania University, 2005

M.Tech. in Fluids & Thermal Sciences, Indian Institute of Technology Kanpur, 2008

M.S. in Mechanical Engineering, University of California, Los Angeles, 2009

PhD in Mechanical Engineering, University of California, Los Angeles, 2012

Employer

ERC, Inc.

Job Description

Propulsion Analyst supporting Jacobs ESSSA contract at NASA Marshall Space Flight Center. Perform system analysis for RS-25 engine, which will help transport astronauts to Mars one day.

As a kid, what did you want to be when you “grew up”?

Teacher or Engineer or Scientist

How far can YOU see? Where do you see the aerospace industry 10-20 years from now?

In two decades we will have hypersonic commercial aircrafts. Asia will become the dominant player in air travel. Drones will be common in everyday life. Humans will have set foot on Mars and will be exploring its surface. Asteroid mining will be a common thing. Humans would have either already found extraterrestrial life or be very close to making this discovery. The aerospace industry will be playing a major role in all of these.

One insightful fact you want everyone to know:

There are more stars in the observable universe than the number of grains of sand on all the world's beaches.

Professional Interests:

Propulsion, Multiphysics modeling, Systems engineering, Space Systems Management

Hobbies:

Astronomy, Photography, Cooking, Hiking and Reading



Name: Michael Staab

Hometown

Wichita, KS

Currently lives in

Huntsville, AL, USA

Education

Bachelors of Science in Aerospace Engineering - Wichita State University

Masters of Science in Aerospace Engineering - Georgia Institute of Technology
PhD Candidate in Aerospace Engineering - Georgia Institute of Technology
Employer
NASA Jet Propulsion Laboratory (JPL)

Job Description

Like most folks at the Lab, I wear multiple hats. I serve as a spacecraft flight controller, or Mission ACE, and the Deputy Real-Time Operations Lead for the Cassini mission. I'm responsible for the safe operation of the Cassini spacecraft at all times while on console. In my other capacities on Lab, I'm training as a Spacecraft Systems Engineer, Flight Director, and Testbed Engineer for the Mars Exploration Rover Opportunity and a Mission Operations Assurance Manager for the Mars Science Laboratory Curiosity.

As a kid, what did you want to be when you "grew up"?

Like most young space nerds, I wanted to be fighter pilot or an astronaut when I grew up, but it wasn't always my first choice. July 4th, 1997 was the landing of the Mars Pathfinder spacecraft with the Sojourner rover. The reason this was a really special event for me was because it was my very first exposure to a space exploration mission and the first live NASA event I watched. It was in that moment that I wanted to become those people on TV—the spacecraft engineers. I think it's really special that the NASA mission that first inspired my interest with space exploration occurred 20 years ago this year, and now I work at the facility, with some of the very people who made it all happen. Talk about living out your dream!

How far can YOU see? Where do you see the aerospace industry 10-20 years from now?

I see the approach to designing and operating new spacecraft missions considerably different in the coming decades compared to the way it's done today. Model-Based Systems Engineering is starting to become a more acceptable practice at JPL, due in large part to the size and complexity of the missions that JPL is undertaking in the near term. The Lab also has to contend with the current and foreseeable budgetary environment, which isn't expected to grow significantly over the next decade. This means JPL needs to work smarter and, most importantly, cost-effectively as projects progress through their design life cycles. I also see a drastic shift in the operation of NASA deep-space robotic missions, moving more toward autonomous real-time spacecraft operations and infusing intelligent-fault protections systems into the spacecraft themselves, enabling the spacecraft to make some of its own decisions regarding responses to system faults, relying less and less on ground intervention.

One insightful fact you want everyone to know:

Engineering is a practical art and that becomes very apparent when you move from the world of academia to industry. There is just so much about engineering that cannot be taught in a classroom setting—real-time spacecraft operations, testbed engineering, spacecraft integration and test, for example—that you have to get into the field and get your hands dirty. JPL's recently retired director put it best, to paraphrase: to become a real expert in a field, you need to spend at least 10 years and 10,000 hours in that field before you can really call yourself an expert in it.

Professional Interests:

Spacecraft Systems Engineering, Intelligent Fault-Protection Systems for Autonomous Spacecraft Operations, Model-Based Systems Engineering Infusion in Future Spacecraft Mission Design

Hobbies:

Astronomy, Photography, Cooking, Hiking and Reading



Name: Dr. Swati Saxena

Hometown

Agra, India

Currently lives in

San Jose, California

Education

PhD in Aerospace Engineering, Penn State University, University Park, PA, 2012

MS in Aerospace Engineering, Penn State University, University Park, PA, 2008

B.Tech. in Aerospace Engineering, Indian Institute of Technology Kanpur, India, 2006

Employer

ESI Group Inc.

Job Description

In my current role, I work as a technical manager leading the projects in the areas of CFD, multi-physics and aero-acoustics related to aerospace and automotive industries. I also lead the Industrial Marketing and Development for Aerospace in North America.

As a kid, what did you want to be when you “grew up”?

I wanted to be an astrophysicist when I was a child and wanted to work for a government space organization like NASA or ISRO (Indian Space Research Organization).

How far can YOU see? Where do you see the aerospace industry 10-20 years from now?

I see the following trends in the aerospace industry in next few years:

Significant technological development in hybrid-electric propulsion in the next 5 to 10 years. Both big companies and start-ups are working to develop more eco-friendly and sustainable propulsion systems to reduce SFC and make planes quieter. Programs like NASA N+3 ensure that we have continued investment and research in these areas affecting future aerospace vehicles.

Increase in small (<500 kW) UAV market. The present small UAV industry is close to \$9B with nearly 18% CAGR. Recent usage of UAVs in damage assessment and recovery efforts after Hurricane Harvey is a landmark in the evolution of drone usage and we will see significant growth and change in regulations in UAV usage in near future.

Flying vehicle development and realization for personal transportation.

Tremendous increase in use of AI in aircrafts for both commercial and military applications.

One insightful fact you want everyone to know:

We are insignificant beings in this vast creation we call Universe and our understanding of science has been only able to comprehend a miniscule part of it. This insight helps me when dealing with challenges that look too big at that time.

Professional Interests:

Fluid dynamics and Multi-physics, Aerodynamics, Aeroacoustics, Turbomachinery, Deep Learning for physical systems

Hobbies:

Painting, Playing tennis, Astronomy, Ayurveda



Name: Courtney M. Oliver

Hometown

Topeka, KS

Currently lives in

Baltimore, MD

Education

BS AAE, Purdue University, 2011

MS SSE, Johns Hopkins University, 2017

Employer

Space Telescope Science Institute (STScI)

Job Description

I am currently a Project Manager in our Program Management Office. I am working to implement project management standards and best practices across our Institute to enable us to better excel in the development and science operations of space-based telescopes.

As a kid, what did you want to be when you “grew up”?

Of course, I wanted to be an astronaut. But, I also wanted to be a Russian translator/interpreter and an actress.

How far can YOU see? Where do you see the aerospace industry 10-20 years from now?

I see humanity pushing boundaries; boundaries of our current knowledge and technology, but also the boundaries of exploration as humanity explores near-space and beyond through manned missions and space-based telescopes.

One insightful fact you want everyone to know:

If you don't know something, admit it. Don't make something up that could be wrong. Say "I don't know, but I will find out" and live up to that promise.

Professional Interests:

Project and program management, spacecraft development and operations, coordination with scientists to push the envelope of knowledge

Hobbies:

I am an avid hiker and backpacker and can often be found on a trail with my husband and dog.