

**DR. DAVID FOGARTY**

**SENIOR RESEARCH ENGINEER  
NATIONAL INSTITUTE OF  
AEROSPACE (NIA)  
100 EXPLORATION WAY  
HAMPTON, VA 23666  
USA**



[www.nianet.org](http://www.nianet.org)

**Education and Training**

- B. Eng. (Hons) Aeronautical Eng, University of Limerick, Ireland, 1999
- Ph.D., Aeronautical Engineering, University of Limerick, Ireland, 2004

**Current Position**

<b>Title</b>	<b>Dates</b>	<b>Employer</b>
Senior Research Engineer	2010-Present	National Institute of Aerospace (NIA) 100 Exploration Way Hampton, VA 23666 USA

**Previous Positions**

<b>Title</b>	<b>Dates</b>	<b>Employer</b>
Research Engineer	2008-2010	National Institute of Aerospace (NIA) 100 Exploration Way Hampton, VA 23666 USA
Research Scholar	2005-2008	NASA Postdoctoral Program NASA Langley Research Center Hampton, VA 23681 USA

**"Home" Town(s)/County(s)**

Killarney, Co. Kerry

**Please describe your current job**

**DAVID FOGARTY**

In a nutshell, my job consists of running computer codes to simulate helicopters in flight and predict the noise that they make. When you hear/see a helicopter flying, you will notice how noisy it is, producing a 'wopwop' type noise. This is what I predict on the computer using all types of computer codes and software. Currently we are using new technologies to try and reduce this noise and make the helicopters quieter.

I work for the National Institute of Aerospace (NIA) in Hampton, Virginia, USA. My office is on the Air Force Base at The NASA Langley Research Center in Hampton. One of the most exciting aspects of being here has been (and still is) watching the fighter jets taking off as I drive to work. They train every day and it's amazing to see them fly, sometimes only a few hundred feet over my building, especially when I can look out my office window and look right into the engines and see the afterburners firing up!!!!

My job allows me to interact with many different people, from all over the world. I get opportunities to present my work at technical conferences. The American Helicopter Society (AHS) holds a technical conference every year. At this conference I get to stand in front of the elite 'helicopter specialists', present my work, and gain recognition for what I have accomplished. I also get to travel to various other conferences around the world.

My job is definitely the most challenging I have ever had but if it had not been for studying Aeronautical Engineering at UL I would not be where I am today.

**Please describe your career path since graduating with your B.Eng. Aeronautical Eng.**

In my first year at UL I participated in the J-1 Student Work & Travel Program. This program, at the time, allowed students to travel to The United States to work legally on a J-1 visa. That was when I realized America was where I wanted to work. It was then I established the goal of starting my engineering career in The States, whether it was to be in Academia or Industry, it didn't matter to me. Several more summers followed and my eagerness and enthusiasm to pursue my dream in The States became stronger. I graduated from UL in September 1999 with my bachelors in Aeronautical Engineering. With my classmates applying for jobs and travelling for interviews in Europe, I stuck to my plan and sent my applications off to America. The results were not promising and I decided that with the fierce competition from engineering graduates from the top American Universities, such as Virginia Tech, Georgia Tech, etc getting a job in America with just a Bachelors degree probably wasn't going to happen. I needed a new plan, so after careful consideration I decided

the only solution was to continue my education at UL and get the highest qualification I possibly could. The years passed, all 5 and a half of them and I finally graduated in Sept 2004 with my PhD in Aeronautical Engineering. My goals didn't change; I had to find a way to work legally in The States. Finally, through the power of Google and endless hours surfing the internet for job opportunities, I stumbled across the NASA Postdoctoral Program. Long story short.....I submitted an application, several weeks later I received a phone call from my supervisor (now one of my current bosses) telling me I had been accepted into the program! My dream of a career in The States had become a reality!

In May 2005 I moved to a small town on the east coast of America called Hampton, in the state of Virginia. My temporary office was at The National Institute of Aerospace until security finished my background checks. Several months later I was given my NASA identification badge and I moved to my new (and current office) on NASA Langley Air Force Base. Ever since that first day when I drove through those gates and security checked my badge, I think how lucky I am to have this opportunity. I drive by the runways where the fighter jets take off every day and what a sight it is, incredible!

I spent 3 and a half years in the NASA Postdoctoral Program and in May 2008 I was permanently employed by The National Institute of Aerospace. Today, I have the same office at NASA Langley Air Force Base. I just received my first ever promotion and I am now a Senior Research Engineer and I am preparing to present a paper at the upcoming American Helicopter Society conference in Virginia Beach in May!

**What made you decide to study Aeronautical Engineering at UL?**

I decided to study Aeronautical Engineering at UL through my fascination with airplanes and flight. I thought it would be fantastic to learn how planes fly!

**Are you glad you did?**

Absolutely!! Aeronautical Engineering has opened up all sorts of doors for me and has allowed me to make my dreams a reality! The broad range of subjects and the things you learn in the course are amazing!

**What did you most enjoy about studying at UL - academically, and also non-academically?**

Non-academically, UL has everything to offer, different types of accommodation, amazing sports facilities, social gatherings etc! Academically, well what can I say...the lecturers in the engineering department are the life and soul of it all!! Without their knowledge and expertise, neither I nor my former class mates would have achieved what we have!

**Where did you do your COOP?**

I did my co-op at Airbus Industries in Toulouse, France. It was a tremendous experience. To work for one of the most widely recognised airplane manufacturers in the world was an honour. Working at Airbus gave me the experience to work as part of a team. I was based in the Air-Conditioning Department. Daily duties involved responding to customers' questions and problem solving. Living in Toulouse, France prepared me for what life would be like outside university and I also got to speak French! I never did try frogs legs but I hear they taste like chicken!!

**What advice would you give school-goers considering choosing Aeronautical Engineering?**

It's an amazing course! If you pursue Aeronautical Engineering at UL it will open up all sorts of doors and opportunities for you. One of the major misconceptions I think future students may have is thinking they will end up doing something with planes, this is definitely not the case. Although it certainly is an option, but it's not the only option, remember there are thousands of companies worldwide looking for aeronautical engineers to work in a wide variety of disciplines. I work at NASA who most would associate with space, but my research is based around helicopters, a totally different area. The aeronautical Engineering course at UL gave me the basics and first principles I needed to get where I am today.

**What advice would you give future graduates of Aeronautical Engineering?**

If you have a dream, follow it. Don't think for one second you're not capable of achieving your dream because you are. If you have the option to do a masters or PhD, do it. Get the highest qualification you can now because it will be that much harder to go back into education if you take a break after your graduate with your Bachelors degree. It will stand to you in the future and you won't be sorry. Don't be afraid, go for it, you have nothing to lose and everything to gain! Don't despair if you get a few or more job rejections, we all do, keep your head up and don't let anything get in the way of your career!