

US Coast Guard Academy Honors Program

NEWSLETTER – FALL 2018

Dr. Alina M. Zapalska, Director



CONGRATULATIONS TO THE 2019-2020 FULBRIGHT APPLICANTS FOR COMPLETING THEIR APPLICATIONS!

ENSIGN ANDREW GOETZ – Fulbright Scholarship at the University of Sheffield, Sheffield, United Kingdom

Proposed Research Project: *3D Printing-Material Property Standards for Metal Parts in the CG and Maritime Industry*

Graduate Degree: Master of Science (Research Option) in Additive Manufacturing and Advanced Manufacturing Technologies

Ensign Andrew Goetz successfully completed his Fulbright application to pursue a Master of Science (research option) degree in Additive Manufacturing and Advanced Manufacturing Technologies at the University of Sheffield, Sheffield in the United Kingdom. The Department of Mechanical Engineering at the University of Sheffield has been recognized for its innovative teaching and groundbreaking research in 3D Printing technology, placing Sheffield in the top five mechanical engineering programs in the UK. If awarded a Fulbright scholarship, Ensign Goetz will study metal 3D Printing technology and make it applicable to Coast Guard (CG) operations. Goetz plans to work on determining the parameters of 3D metal printers that will be utilized for printing repair parts on demand with quality assurance and cost-saving. This technology will allow ships to be repaired without returning to their homeports and, therefore, improve CG mission effectiveness in remote locations and challenging conditions, such as the Arctic, where conventional manufacturing is infeasible. The CG ships equipped with this technology will also be able to assist the ships that are stranded and desperately in need for replacement parts. Upon completion of his proposed Fulbright project, Ensign Goetz will provide a report to the CG Research and Development Center and the CGA on implementation of 3D Printing throughout the USCG. After graduation from the CGA in May 2018, Ensign Andrew Goetz began serving the USCG as a marine inspector in Mobile, Alabama.

1/c GYOMIN LEE – Fulbright Scholarship at Seoul National University, Seoul, South Korea

Proposed Research Project: *Enhancing Cybersecurity: Development of Software Defined Networking*

Graduate Degree: Master of Science in Computer Science and Engineering

1/c Gyomin Lee is applying for a Fulbright Scholarship (Open Study/Research Award) to pursue a two-year Master of Science degree in Computer Science and Engineering at Seoul National University (SNU), Seoul, South Korea. SNU is one of the top research universities in computer science and cybersecurity worldwide. Cadet Lee plans to work on a project titled *Enhancing Cybersecurity: Development of Software Defined Networking (SDN)*. His goal is to design a software that will monitor network traffic to recognize internal and external threats, to defend the networks against cyber-attacks, and to enhance the security of network infrastructure. At SNU, he will work with world-renowned experts in the areas of networks, systems, and virtualization. Dr. Taekyoung Kwon and Dr. Wha Sook Jeon, professors of computer science and engineering at SNU, will supervise his research and graduate study. The experts at USCG Cyber Command and the Sandia National Laboratories agreed to assist with his project. SNU has appropriate resources, and Cadet Lee will utilize two labs: *Network Convergence and Security Lab* and *Distributed Computing Systems Lab* to develop, complete, and test his model. Cadet Lee's Fulbright study would not only serve as a platform to study cybersecurity but also as an impetus to join the greater cybersecurity community, to collaborate with other researchers and students, and to engage in community efforts. Cadet Lee, an Electrical Engineering major, is scheduled to graduate from the USCG Academy in May 2019.

THE ALPHA LAMBDA DELTA CHAPTER OF THE UNITED STATES COAST GUARD ACADEMY NATIONAL HONOR SOCIETY FOR FIRST-YEAR SUCCESS

THE INDUCTION CEREMONY FOR THE CLASS OF 2021 WILL BE HELD ON TUESDAY, THE 25TH OF SEPTEMBER 2018 AT THE ALUMNI HALL
MAJOR GENERAL BRUCE K. SCOTT WILL BE THE KEYNOTE SPEAKER AT THE EVENT

The Coast Guard Academy Chapter of The Alpha Lambda Delta Honor Society will initiate fifty-three students from the Class of 2021. Students must have obtained a 3.5 GPA or better and be in the top 20% of their class during their fourth-class year to be named for membership. The Coast Guard Academy Chapter of The Alpha Lambda Delta Honor Society will initiate the following students from the Class of 2021:

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|-------------------------|----------------------|---------------------------|
| 1. Thomas Ankers | 20. Ethan Geurtsen | 39. Rachel Piche |
| 2. Mikeal Axelsson | 21. Yonas Gordon | 40. Katherine Retz |
| 3. Salena Bantz | 22. James Hall | 41. Phillip Victor Romero |
| 4. Cole Beauchemin | 23. Veronica Hine | 42. Katie Schiavo |
| 5. Alexander Bellan | 24. Andre Horner | 43. Sean Seyller |
| 6. Emily Benson | 25. Matyas Huck | 44. Henry Smith |
| 7. Benjamin Bertsche | 26. Edmund Huminski | 45. Grace Tarbrake |
| 8. Logan Bonner | 27. Mia Huncharek | 46. Ruth Tian |
| 9. Maxwell Buchanan | 28. Thomas Klawinski | 47. Aiden Uvanni |
| 10. Jacob Cheeseman | 29. Samantha Koval | 48. Matthew Varney |
| 11. Duncan Clark | 30. Charlee Kraiss | 49. Joshua Webster |
| 12. Joseph Collins | 31. Isaac LaLonde | 50. Sarah Wenzel |
| 13. Anthony Contreras | 32. Felicia Lombardi | 51. Zachary Woods |
| 14. Drusilla Corbett | 33. Haley McCue | 52. Maylis Yopez |
| 15. Jake Danzer | 34. Samuel Monaco | 53. Ryan Yoo |
| 16. Ryan Dunkle | 35. Patrick Morris | |
| 17. Annabella Farabaugh | 36. James Morrison | |
| 18. John FitzPatrick | 37. Brian Nelson | |
| 19. Catherine Galloway | 38. Kazuki Oshiro | |

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THE OLMSTED FOUNDATION

THE OLMSTED FOUNDATION LUNCH MEETING AND SCHOLARSHIP ORIENTATION

THE CGA HONORS PROGRAM INVITES THE CG OFFICERS FOR A LUNCH MEETING WITH
MAJOR GENERAL BRUCE K. SCOTT, USA (RET.) PRESIDENT AND CEO, OLMSTED FOUNDATION AND
OLMSTED SCHOLAR - 1979
AND LCDR KRISTEN HAHN, OLMSTED PROGRAM MANAGER

Location: The O'Club

Time: 1200 - 1330, Wednesday, September 26, 2018

Reservations and POC: 2/c Valerie Hines (Valerie.R.Hines@uscga.edu) Reservations must be made by 0900 22

September 2018

Coordinator: Dr. Alina M. Zapalska (Alina.M.Zapalska@uscga.edu)

Cost for Meal: \$8.00

OUR NEWS ON THE CURRENT CGA HONORS PROGRAM SCHOLARS

LTJG LAURA BECK (CLASS 2017) - 2018-2019 FULBRIGHT AWARD TO NORWAY

Ensign Laura Beck is a Fulbright scholar to Norway. She has just reported for her Fulbright orientation in Oslo, Norway. During next two years, she will be pursuing an International Master of Science degree in Marine Technology with a specialization in Marine Engineering at the Norwegian University of Science and Technology in Trondheim, Norway. As the NTNU is a research leader in the field of green maritime transport, Ensign Beck will conduct research to develop a hybrid propulsion solution that will increase fuel efficiency and reduce emissions in ships. She proposes to design a hybrid of a diesel engine and a high-capacity battery system charged by renewable energy sources, such as wind or solar. This alternative will reduce emissions in ships, especially those that operate in coastal areas.

ENSIGN ERIN WRIGHT (CLASS 2018): 2018-2019 FULBRIGHT AWARD TO THE UNITED KINGDOM

Cadet Wright has been awarded a 2018-2019 Fulbright scholarship to pursue a Master of Philosophy degree in Energy Engineering at Newcastle University, Newcastle, UK. Her Fulbright research project will be on the biofuel combustion process in diesel engines. She plans to explore the effects of nanoparticle additives to biodiesel as a method for decreasing emission levels and increasing engine efficiency. As a Fulbright scholar, she plans to establish a research partnership between the Sir Joseph Swan Centre for Energy Research at Newcastle University and the USCG Research and Development Center's Science and Technology Division. She will also join the *Engineers Without Borders* organization within Newcastle community to become a mentor to young students and teach them sustainable engineering principles.

LTJG CHRIS DIBARI (CLASS 2016): 2017-2018 FULBRIGHT AWARD TO ICELAND

LTJG DiBari completed his first year of coursework for an M.S. in Environment and Natural Resources at the University of Iceland. In 2018-2019 academic year, LTJG DiBari will be completing his Master's thesis *Evaluating Renewable Energy Technologies on Grímsey Island*, the only portion of Iceland that lies above the Arctic Circle. He will also be taking courses in Environmental Law, Renewable Energy, and Cost Benefit Analysis. LTJG DiBari is also active with the Icelandic Rugby Club and the Graduate Student Group GAIA. He also organized a panel with members of the U.S. Embassy to discuss the work of the U.S. does regarding *the Environment in Iceland*. LTJG DiBari has also been working with the Director of Operations for the Icelandic Coast Guard, Commodore Ásgrímur Ásgrímsson (USCGA '87) and, in the spring of 2018, LTJG DiBari sailed with the Icelandic Coast Guard Ship *THOR* to observe and help conduct fisheries boardings as well as participated in helicopter and law enforcement training. Furthermore, LTJG DiBari mentored a member of the Icelandic Coast Guard interested in the USCGA who has recently completed the swab summer training program with the class of 2022.

ENSIGN PATRICK LEDZIAN (CLASS 2017): 2017-2018 FULBRIGHT AWARD TO THE NETHERLANDS

2017-2018 Fulbright scholar and recipient of the Justus en Louise van Effen Excellence Scholarship (2017-2019), Ensign Patrick Ledzian is starting his second year of a MSc. in Systems and Control at the Delft University of Technology in Delft, Netherlands. Ensign Ledzian is working in the Distributed Robotics group and he is conducting thesis research on *Network-Decentralized Coordination of Quadcopter Swarms for Search-And-Rescue Applications*. The project focuses on simulation of real-time decentralized 3-D trajectory generation, mathematical proof of scalability, and physical implementation utilizing a swarm of quadcopters. Ensign Ledzian is mentoring new Fulbright Scholars in the Netherlands. He is also an active member and ballroom dance competitor of the TU Delft *Blue Suede Shoes* ballroom dancing society, and a member of an outdoor conservation and rock-climbing society, *Nederlandse Klim-en Bergsport Vereniging*.

The CGA Honors Program Internships and Fellowships

American Service Academies Program Internship is a three-week Holocaust educational initiative that was created by the Auschwitz Jewish Center specifically for a select group of cadets and midshipmen from the four U.S. military academies. **THE 2019 SUMMER ASAP INTERNSHIP - online application deadline 11/02/2018:** <https://mjhnyc.wufoo.com/forms/american-service-academies-program-2019/>

The Saratoga Fellows Program provides a post-undergraduate educational and professional experience for officers in the Armed Forces of the United States. The program is designed to broaden each fellow's understanding of our country's intellectual and moral traditions. That understanding addresses the ability to engage in public discourse and thus it strengthens an officer's calling to public service. **The 2019 SUMMER SARATOGA FELLOWSHIP - online application deadline 01/30/2019:** <https://www.johnjayfellows.com/saratoga-start-your-application>