

Brian Loughran

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Education

2013–2017 **Mechanical Engineering**, *Lehigh University*, GPA – 3.3.
Minors in Aerospace Engineering and Business

Experience

- 2015 **Mechanical Engineering Intern**, ALCATEL-LUCENT BELL LABS, Murray Hill.
Wind Tunnel design and fabrication for use in testing advanced 4G LTE products. Wind Tunnel employed to thoroughly characterize flow dynamics through the system including cooling fan performance. Thermal chamber testing to determine maximum rated temperature. Acoustic testing in fully anechoic chamber of cooling fans.
- 2014 **Teacher's Assistant**, LEHIGH UNIVERSITY.
(Applied Engineering Computer Methods) Support Professor in teaching MATLAB and Arduino Real-Time Processing programming languages. Bi-weekly responsibilities include assisting students in analysis and debug of mechanical control systems.
- 2012-2014 **Inventory Management**, QUAKER PET GROUP, Whippany.
Responsible for accurate maintenance of warehouse inventory as well as documentation and organization of shipments coming in and out.

Leadership

- 2015 **Master of Ceremonies**, ALCATEL-LUCENT SUMMER INTERNS, Murray Hill.
Elected by fellow interns to organize and host final presentation of summer projects.
- 2014-2015 **Treasurer**, LEHIGH UNIVERSITY ICE HOCKEY, D1 Club Varsity.
Collect, budget and manage team funds (over 80,000 dollar working funds).
- 2014-2015 **Scholarship Chair**, KAPPA SIGMA, Beta Iota.
Introduced 5 bi-annual scholarships for students of high academic standing; this was in addition to main responsibilities including helping members improve GPA, coordinating new member study hours, and arranging monthly meetings with school officials.

Related Projects

Optimized pitch controller design for Boeing 737, including a SIMULINK model of expected performance
Design, sand casting, and LabVIEW performance testing of a heat sink
Research and analysis of X-51 WaveRider, a scramjet powered rocket for prolonged hypersonic flight
MATLAB program to solve stress, strain, internal moment and shear for beam under generalized loading
Arduino program with use of 2 lasers and 2 servo motors to operate a device to count ping-pong balls

Awards and Distinctions

Packer Award for Excellence in Engineering
Dean's List (Lehigh University)
Summa Award
AP Scholar With Distinction
President's Award for Educational Excellence

Skills

Proficient with C++, Java, Python, MATLAB, Arduino, SIMULINK, SolidWorks, NX Cast, Pro/Engineer
Autodesk Mechanical, Simul8, LabVIEW