



Byron Eng

Curriculum Vitæ

*"No problem of human destiny is beyond human beings."
-John F. Kennedy*

Education

- 2017–Present **M.S. Mechanical Engineering**, *University of Utah*, Salt Lake City, UT.
2012–2016 **B.S. Physics**, *University of Utah*, Salt Lake City, UT.
2012–2016 **B.S. Atmospheric Sciences**, *University of Utah*, Salt Lake City, UT.

Undergraduate Research

Projects

- title *Investigating Methane Emissions in the Salt Lake Valley: An Atmospheric Inverse Study*
supervisors Prof. John C. Lin, *Department of Atmospheric Sciences*, University of Utah
Dr. Arlyn E. Andrews, *National Oceanic and Atmospheric Administration*
description Inverse modelling and other analyses performed to better understand sources of methane in the Salt Lake Valley.
publication University of Utah Undergraduate Research Journal (<http://epubs.utah.edu/index.php/URJ>)

- title *Utah Atmospheric Trace gas and Air Quality lab's urban carbon dioxide network: Instrumentation, sample design and stability*
supervisors Ryan Bares, *Department of Atmospheric Sciences*, University of Utah
Ben Fasoli, *Department of Atmospheric Sciences*, University of Utah
Prof. John C. Lin, *Department of Atmospheric Sciences*, University of Utah
description Applied thermodynamic equations to improve accuracy of water vapor corrections to carbon dioxide measurements.
publication In Submission

- title *Salt Lake City Methane Leakage Rate Study*
supervisors Prof. John C. Lin, *Department of Atmospheric Sciences*, University of Utah
Dr. Logan Mitchell, *Department of Atmospheric Sciences*, University of Utah
description Compared Salt Lake County Methane emissions estimates with natural gas usage data to estimate natural gas leakage rate.

Presentations

- 2016 **Research on Capitol Hill**, *Utah State Capitol Building*, Salt Lake City, UT.
Presented research poster to Utah state legislators

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- 2016 **Utah Conference on Undergraduate Research**, *University of Utah*, Salt Lake City, UT.
Presented research poster to researchers from multiple universities
- 2015 **NOAA Science and Education Symposium**, *NOAA Headquarters*, Washington, D.C.
Delivered oral presentation to NOAA scientists and other NOAA Hollings Scholars

Experience

Vocational

- 2014–Present **Tutor–Physics & Math**, *Chegg.com*.
Tutored College and AP students in Physics & Math
- 2013–2016 **Undergraduate Research Assistant**, *University of Utah*, Salt Lake City.
Inverse modelling and other analyses of methane in the Salt Lake Valley.
- Summer 2015 **Research Intern–Hollings Scholar**, *National Oceanic and Atmospheric Administration*, Boulder, CO.
Programmed and conducted inverse model to estimate methane emissions in the Salt Lake Valley.

Miscellaneous

- 2014–2015 **Custodian**, *University of Utah–Early Childhood Education Center*, Salt Lake City, UT.
- 2012–2014 **Community Safety Patrol**, *University Student Apartments*, Salt Lake City, UT.
- 2011–2012 **Student Officer**, *Prince George's County Police Department*, Lanham, MD.
- 2004–2010 **Airborne Linguist**, *United States Air Force*.

Awards and Honors

- Recipient; National Oceanic and Atmospheric Administration Ernest F. Hollings Scholarship
- Recipient; University of Utah Department of Atmospheric Sciences Outstanding Senior Award
- Recipient; University of Utah Department of Mines and Earth Sciences; Departmental Scholarship
- Recipient; Shih Kung Kao Scholarship, Josephine Beam Scholarship, Stoker Scholarship
- Inducted member; National Society of Leadership and Success – Utah Chapter
- Member; Phi Beta Kappa Honors Society, Golden Key International Honor Society
- Member; Alpha Sigma Lambda Honor Society – University of Utah Upsilon Upsilon Chapter

Computer skills

OS	Windows, Mac, Linux	Office	Word, Excel, PowerPoint
Programming	R, Matlab, Python	Math	Maxima, Maple
Publishing	L ^A T _E X, BibT _E X, R Markdown		

Interests

- Technology Gadgets, automation, innovation
- Music Guitar, violin, piano
- Finance Budgeting, investing, entrepreneurship