

SENIORS

Emily Barnes

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EDUCATION

Yale University, New Haven, CT

- Candidate for Bachelor of Science in Environmental Engineering
- Expected Graduation: May 2017
- GPA: 3.92/4.0

RELATED COURSEWORK

Atmospheric Chemistry

Aquatic Chemistry

Organic Pollutants in the Environment

Air Quality Control

Renewable Energy

Green Eng. and Sustainable Design

RESEARCH EXPERIENCE

The Gentner Research Group, Research Assistant, New Haven CT (Summer 2014-2015, 2017)

- Synthesized data, performed primary research, prepared conference poster boards, and constructed air quality monitoring equipment for Dr. Drew Gentner, PhD
- Investigated BVOC oxidation pathways, analyzing field and chamber samples and highly time-resolved CIMS data to illustrate reaction pathways through molecular corridors

WORK EXPERIENCE

The Colorado Fourteeners Initiative, Communications and Field Research Intern, Golden CO (Summer 2016)

- Analyzed data and published a report estimating 2015 trail use for Sustainable Trails Program
- Collected data on 2016 trail use through back-country field research trips, placing and maintaining TRAFx infrared counters
- Wrote PR posts proofread company publications for volunteer and public outreach initiatives

Wright Water Engineers, Water Engineering Intern, Denver CO (Summer 2015)

- Reviewed and synthesized scientific literature, licensing documentation, and BMP reports to inform and support expert witness testimonials given by senior company representatives
- Prepared reports and presentations for client meetings
- Performed statistical analyses of stream data to inform design decisions in flood mitigation and stream rehabilitation projects

LEADERSHIP, ACTIVITIES, and ACHIEVEMENTS

Tau Beta Pi Engineering Honor Society, Yale University, New Haven CT, (2015 -present)

- Corresponding Secretary, Connecticut Alpha Chapter
- Initiated TBP involvement in 'Pathways to Science,' a service organization dedicated to supporting New Haven middle and high school students interested in pursuing science

Yale Varsity Cross Country and Track, Yale University, New Haven CT (2013 – present)

- Represented Yale at Cross Country and Track Competitions year round, including the 2015 Ivy League Cross Country Championships in which Yale claimed 2nd
- Sustainability Captain 2014-2016

Splash at Yale, Yale University, New Haven CT (2014)

- Taught 'Science of Cooking' seminar to New Haven middle school students as a volunteer

Bulldog Buddies Tutoring, Yale University, New Haven CT (2016-2017)

- Tutored disadvantaged New Haven middle school students in reading

SKILLS

Foreign Language: Advanced Spanish

Technology: Microsoft Office, Google Platforms, Igor Pro, Matlab, C, R, Javascript, Python