

ADAM S. BATCHELLOR

PHONE: (585) 409-1335

EMAIL: adam.batchellor@gmail.com

LINKEDIN: <https://www.linkedin.com/in/adam-batchellor-75b20526/>

GITHUB / PORTFOLIO: AdamBatch.Github.io

SUMMARY:

Retired Air Force officer looking to make a career change after 20 years of military service. Experienced team leader, manager, and individual contributor in collecting, connecting, and communicating information to customers across the renewable energy, higher education, and medical communities.

TECHNICAL SKILLS: MS Word, MS Excel, MS PowerPoint, Jupyter Notebooks, Power BI, Tableau, Python, JavaScript, Processing, Matlab, CSS, HTML, ReactJS, R, RStudio, Plotly, Dash, ECharts, Docker, ETL, Statistics

EXECUTIVE EXPERIENCE

Director of Curriculum and Course Design, 2023-2024

- Supported the professional development of teachers via lunch-and-learn events and certification programs
- Guided 48 faculty through five-week workshops focused on building inclusive and learning-centered classes

Executive Board Member, Faculty Senate, 2022-2024

- Developed a strategic plan guiding the actions of 30 senators and six committees in support of 500 faculty

Director of Assessment, Chemistry Department, 2022-2024

- Ensured course content alignment with department outcomes and develop learning paths to achieve them

Chair, Hockey Eligibility Committee, 2022-2024

- Guided team to a 3.1 average GPA over three years as well as multiple regional/national academic honors

Chair, Curricular Issues Committee, Faculty Senate, 2020-2022

- Embedded nine faculty on university outcome teams enhancing information flow across all constituencies

Director of Occupational Safety and Health, Chemistry Department, 2019-2022

- Managed the cradle-to-grave lifecycle of over 5K chemicals used in the department and trained 35 staff
- Mitigated 11 deficiencies and achieved 100% compliance with national standards for two straight years

Director of Lab Operations, Chemistry Department, 2019-2020

- Led four-member team in lifecycle management of \$7.7M in lab equipment and over 500 unique chemicals
- Translated business requirements from 34 faculty to fund 29 lab-based courses on a \$150K annual budget

DATA SCIENCE AND VISUALIZATION EXPERIENCE

Fellow, Data Analysis and Visualization

- Created a dashboard utilizing an interactive map to display gate-use data for all five terminals at DFW airport
- Built web visualizations for a database enabling researchers to compare the properties of 40 samples at once
- Developed multi-figure user-interface for models describing the hydrogen fueling operations of fleet vehicles
- Extracted and transformed data from relational and NoSQL databases to improve reliability and accessibility

TEACHING EXPERIENCE:

Course Director, General Chemistry, 2022 – 2024

- Designed courses for 1600 students focusing on data analysis and infographics with a 7% gain in test scores
- Developed style guides to improve the readability of reports and implemented visualization best-practices
- Trained students on data literacy and basic statistics to improve their ability to make data-driven decisions
- Revamped course content and pedagogy to better align with the University's Principles of Science Outcomes
- Launched 12 group-based pre-lab activities focused on experimental design and data collection/manipulation
- Created metacognitive activities to help students develop their ability to self-assess on unfamiliar material

Assistant Course Director, General Chemistry, 2021 – 2022

- Supported faculty by creating and preparing lab materials driving scientific method utilization for 800 students
- Reduced hazardous waste generation in labs by over 50% while maintaining course educational outcomes

Instructor, General Chemistry, 2011 – 2013 & 2019 – 2021

- Guided multiple sections of 20-25 students in completion of STEM core course requirements

Course Director, Environmental Chemistry and Weapons Chemistry, 2012 - 2013

- Led elective courses designed to provide advanced, Air Force relevant, content to non-chemistry majors

PREVENTIVE MEDICINE / EHS EXPERIENCE:

Bioenvironmental Engineering and Public Health Flight Commander, 2016-2019

- Led 18 medics in occupational and environmental health risk assessment supporting 39K base workers/families
- Directed an \$850K annual operations budget covering both training and equipment procurement/maintenance
- Drove deployer availability to 6% above the Air Force average through an improved gas-mask testing process
- Participated in a process improvement event resulting in a 26% improvement in customer access to providers

Bioenvironmental Engineer, 2005-2009

- Led radiation protection program and ensured 100% compliance for \$20M in assets across 51 organizations
- Led nine-person emergency response team responsible for chem/bio/rad assessments for 26K base residents
- Led 12 industrial hygiene professionals inspecting 84 workplaces in support of an \$11B industrial operation

PROJECTS:

- Served as editor on a cross-disciplinary team tasked with determining the value of Air Force higher education
- Supported AF innovation office by vetting proposals related to off-grid energy generation and security
- Provided academia-wide research to a working group developing a new university policy on academic minors
- Helped stand up new Air Force PhD Management Office improving the workforce utilization of 600 officers
- Led efforts of 150 people in planning and execution of an annual strategy meeting for Air Force senior leaders

MENTORSHIP/ VOLUNTEERISM:

- Research mentor to five undergraduate students guiding their ability to work, write, and think independently
- Academic advisor to 22 chemistry majors ensuring all graduation requirements were met in only four years
- Host parent for five French and three Brazilian exchange students providing a half-year home away from home
- Sole chaperone on four international trips guiding 20 students towards improving their cultural awareness skills
- Youth soccer and running coach helping kids develop their sportsmanship, teamwork, and sport-specific skills

EDUCATION:

MicroMasters, Big Data Analytics

Doctor of Philosophy, Chemistry

Master of Science, Chemical Engineering

Bachelor of Science, Chemical Engineering

University of Adelaide, (Projected) 2025

University of Oregon, 2016

University at Buffalo, 2011

Clarkson University, 2003