

Kelsey A. Frazier, M.S., EIT

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Summary

I offer a combination of business acumen, unfettered passion for engineering, and a strong ethical sensibility. As a mechanical engineer with project management experience in the defense sector, I enjoy both working as part of a team and taking on leadership roles. I am particularly interested in ambiguous problems that require the synthesis of complex information. My experience has taught me to keep safety my number one priority, to meet new challenges head on, and to be grateful for every opportunity that comes my way.

Education

Doctor of Philosophy

December 2022 | Mechanical Engineering | University of Alaska Fairbanks | GPA: 4.0

Master of Science

January 2020 | Mechanical Engineering | University of Alaska Anchorage | GPA: 4.0

Bachelor of Science

December 2019 | Mechanical Engineering | University of Alaska Anchorage | GPA: 3.5

FELLOWSHIPS

2021 – 2023 | Ph.D. Fellowship | Oil Spill Recovery Institute | \$30,000 per year

2018 – 2019 | Graduate Fellowship | Arctic Domain Awareness Center | \$40,000 per year

2016 – 2018 | Undergraduate Fellowship | Arctic Domain Awareness Center | \$33,000 per year

2016 – 2019 | BP Scholar | BP America Inc. | \$5000 per year

CERTIFICATIONS

Engineer-in-Training January 2020 | National Council of Examiners for Engineering and Surveying

Skills & Abilities

COMMUNICATION AND LEADERSHIP

- Strong communication and relationship building skills both within my team and with clients
- Experienced leading multi-disciplinary teams comprised of scientists, academics, and defense personnel to successfully achieve program objectives
- Takes initiative to help customers solve problems and advance operational resources

PROJECT MANAGEMENT

- Managed RFPs and contracts ranging from \$150,000-\$1 million per year in the commercial insurance sector for public and private entities
- Currently managing project milestones and outcomes for 2 defense projects in operational research for the US Coast Guard with budgets ranging between \$200-\$250,000 per year
- Consistently meets customer timelines to accomplish projects that meet specifications

TECHNICAL SKILLS

- Hands-on maintenance experience in the oil and gas sector with both rotating equipment (pumps, turbines, compressors) and fixed equipment (pressure vessels, heat exchangers, tanks)
- Advanced computational modeling experience using large environmental data sets to produce new situational awareness

- Comprehensive knowledge of engineering challenges and environmental risks concerning Arctic shipping and commercial development of the region

Experience

RESEARCH ASSOCIATE

March 2016-Current | Arctic Domain Awareness Center | University of Alaska Anchorage

- Demonstrated ability to manage defense R&D projects assigned by ADAC leadership according to the annual work plan, from conceptualization to closeout
- Leads multi-disciplinary teams comprised of scientists, academics, and defense personnel to collaborate on project needs, set outcomes and objectives, and perform necessary work
- Managed the proposal process for applied research programs, the Arctic Ice Condition Index (ARCTICE) and the Arctic Facilities and Infrastructure Environmental Change Risk Index (ERI)
- Supports ADAC team by providing professional management and engineering expertise for both current and new projects through proposal review, RFP response, and project management
- Monitoring all project milestones to ensure timely delivery of current year's work plan
- Maintaining high levels of communication with project stakeholders and customers to ensure all groups are up to date on project accomplishments
- Providing continuous monitoring of the contractor's quality of output for projects and ensuring compliance with the contracted work documents.

ENGINEERING INTERN

May 2019-August 2019 | BP Exploration Alaska | Integrity Management Team

- Cultivated hands-on skills in planning, engineering, construction, design, and deferred maintenance for two facilities on the North Slope (Pt. McIntyre 2 and Flow Station 3)
- Managed the development of new inspection strategies for facility heat exchangers through a novel, international team approach

ENGINEERING INTERN

May 2018-August 2018 | BP Exploration Alaska | Mechanical Discipline Team

- Engaged in management of engineering-related design issues including assessment and redesign of equipment unable to meet standard operating guidelines. I also submitted proposals for corrective measures with detailed directions to the maintenance team

SENIOR HEALTHCARE REFORM STRATEGIST

August 2008 – March 2014 | David Frazier & Associates, Anchorage AK

Entrepreneurship

VICE PRESIDENT & CO-FOUNDER

May 2001 – May 2004 | Alaska Robotics Education Association

Addressing a community demand for more robotics and engineering after-school activities, I started an educational non-profit to fundraise and advocate for student programs. My team and I grew the organization from 10, after-school robotics teams in two cities to 150 robotics teams in 45 communities across Alaska. In 2004, the non-profit was absorbed into the Juneau Economic Development Council where it successfully operates today.

Volunteerism

COMPETITION JUDGE

1999-Current | FIRST | Coach, Judge, Senior Mentor, and Coordinator