

# EVAN HIGGINS – MECHANICAL ENGINEER

(623) 326-5894 • evanhiggins99@gmail.com • linkedin.com/in/evanhiggins20 • Cave Creek, AZ, 85331

## EDUCATION

**BSME** Northern Arizona University, Mechanical Engineering May 2024

## SKILLS

**Computer:** AutoCAD, SolidWorks, MATLAB, ArcGIS Pro, Microsoft Word, Excel, PowerPoint

## SENIOR CAPSTONE – HYDROPOWER COLLEGIATE COMPETITION 2024

- Directed a six-member interdisciplinary team in the conceptual design and feasibility analysis of a small-scale hydropower project, utilizing project management skills for optimal scheduling and task allocation.
- Oversaw the process of risk assessment and cost modeling for a sustainable hydropower plant, identifying economic and site constraints to accurately estimate overall project costs and energy production.
- Performed extensive research and led collaboration with industry experts across multiple disciplines, leveraging diverse insights that resulted in economical and eco-friendly design concepts.

## EXPERIENCE

**Kimley-Horn** – Phoenix, AZ May 2023 – August 2023

**Summer Position:** Mechanical Engineering Intern

- Assisted in planning and design efforts for multiple water/wastewater projects, including conveyance pipelines and treatment facilities, contributing to the team's success in meeting client needs.
- Conducted thorough pothole assessments and implemented necessary design modifications to a proposed reach line to ensure compliance with city design standards.
- Carefully reviewed and enhanced technical drawings in AutoCAD to ensure accuracy and adherence to client specifications for all project deliverables.
- Conducted comprehensive research on emerging and existing treatment technologies, contributing to informed decision-making processing for treatment design.
- Contributed writing in preliminary design reports for proposed well sites, evaluating filtration and treatment methods to optimize water quality and production efficiency.

**Sundt Construction** – Gilbert North Water Treatment Plant May 2022 – August 2022

**Summer Position:** Field Engineering Intern

- Facilitated construction by mapping out utility installations and establishing reference points, as-builts, grades, and elevations.
- Applied hands-on project experiences to build a virtual tour on the plant and present to Sundt/PCL executives and managers.
- Interacted with Sundt/PCL job site managers and subcontractors to review pre-task plans and coordinate work that complied with design and construction documents.
- Observed construction methods, installations, inspections, and testing procedures to maintain consistent progress.
- Reviewed construction documentation conformed to quality assurance standards and client requirements.

**Republic Services** – Phoenix, AZ May 2021 – August 2021

**Summer Position:** Digital Operations Intern

- Responsible for creation of process documentation, project content, and inputs for agile project delivery.
- Attended internal core team working sessions to provide insights and knowledge into business requirements, risk mitigation, and approach for product testing.
- Supported gathering requirements and socializing project deliverables with key stakeholders.
- Aligned business and IT stakeholders of product functions and objectives through clear and concise communication.
- Reviewed all deliverables and deliverable templates while providing suggestions for quality improvement.