

Joseph Black

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Education

- B.S. Chemical Engineering, *Brigham Young University*** Apr 2021
Provo, UT
- Emphasis in Energy/Environment, Minor in Economics
 - GPA: 3.60/4.0
 - BYU Academic Scholarship – Six-time recipient, half tuition

Chemical and Engineering Experience

- Technical Support Engineer, *Epic*** Jul 2021 – Present
Verona, WI
- Enhanced reporting model filters, metrics, and tutorials for Septic patient data
 - Proactively supported dozens of hospitals nationwide, increasing organizational achievements
 - Collaborated with IT, operations, and executives, increasing clinician and software efficiency
 - Developed methods to locate and clean up server objects and software build

- Intern, Process Engineer, *Valero Energy*** Jun 2020 – Aug 2020
Benicia, CA
- Designed a permanent SRU inlet distribution solution to meet industry standards
 - Optimized nC4 railcar offloading process, increasing annual profits by nearly four million dollars
 - Modeled the sootblower system on PS, FGS, and SCR to mitigate corrosion and maintenance
 - Engineered the recycling of spent caustic at WWT, decreasing hazardous material generated

- Research Assistant, *DIPPR 801 Project*** Jan 2019 – Jul 2021
Provo, UT
- Reverse-engineered autoignition prediction program from Assembly and Fortran
 - Oversaw the research and addition of several chemicals to the database
 - Experimented on 100's of chemicals to determine heat capacities and autoignition temperatures
 - Designed and installed a new process to increase safety in the lab

- Intern, Content Specialist, *SpotterRF, LLC*** Mar 2018 – Jan 2019
Orem, UT
- Engineered radar quality to a margin of 5% error while meeting deadlines
 - Accelerated the decision-making process of end users by 40% by creating a standardized form
 - Authored the company's most successful Press Release in viewership and interactions by 200%
 - Increased company revenue by 50% through sale's team efficiency improvements

Leadership Experience

- Historian, Executive Council Member, *AIChE BYU Local Chapter*** Feb 2018 – Jan 2020
Provo, UT
- Diligently catalogued club history to win the Outstanding Chapter Award twice
 - Analyzed historical data to increase participation by 30% and student funding by 40%
 - Aided in the success of club members, various events and major club decisions

- Student Supervisor, *BYU Creamery and Food-to-Go*** Aug 2017 – Mar 2018
Provo, UT
- Improved team efficiency by 66% by increasing organizational efforts
 - Directed team with active problem-solving skills to fix 10 or more daily customer issues

Other Leadership Opportunities

- Vice President of Internal Affairs – AIChE elected, helping with transitory actions of COVID-19
- Eagle Scout – Built a playground for TESSA, a safe house for abused women and children
- Team Captain – Defensive Player of the Year, and 5A All-State Colorado Basketball Player

International Volunteering Experience

- Bass Guitarist, *Mountain Stings – BYU International Folk Music Ensemble*** Jan 2019 – Jan 2020
Provo, UT
- Devoted 10+ hours per week to provide service and entertainment
 - Toured China, Utah, Idaho, and Wyoming with other International Music and Dance Teams

- Voluntary Representative, *The Church of Jesus Christ of Latter-Day Saints*** Jan 2015 – Feb 2017
Rosario, Argentina
- Trained three new representatives from various countries, one on one
 - Led two 26-person groups, increasing performance of each by more than 25% in 4 months