

# Rohan Dighe

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## EDUCATION

**Purdue University – West Lafayette, IN**

B.S. in Chemical Engineering with Honors Designation

Honors Thesis: “*Synthetic Routes to Prepare MEL Zeolite Catalysts with Different Active Site Content and Arrangement*”

**GPA: 3.79**

May 2020

## RELEVANT WORK EXPERIENCE

**Wood Mackenzie**

**Research Analyst – Carbon Capture, Usage, and Storage**

*August 2023 – Present*

*Houston, TX*

**Chevron Phillips Chemical Company – Cedar Bayou Plant**

*June 2020 – July 2023*

**Optimization Engineer (Ethylene Cracker), Production Engineer (Polyethylene Reactors)**

*Baytown, TX*

- Achieved all-time production record by making daily optimization recommendations based on process data
- Commissioned new LP Optimization Model for ethylene unit feedslate and production optimization
- Developed models and dashboards to maximize unit production while maintaining stability
- Analyzed hydrocarbon pricing and trends to optimize unit profitability on a daily basis
- Applied statistical process control with linear/nonlinear modeling tools (scikit-learn, etc.) to optimize production
- Performed daily, hands-on unit troubleshooting with plant operators and maintenance to ensure stable and safe operation of 3 different polyethylene production units.

**Chevron Phillips Chemical Company – Sweeny/Old Ocean Facilities**

*May 2019 – August 2019*

**Process Engineering Intern**

*Sweeny, TX*

- Modeled water adsorption profiles, cooling tower performance, and compressor systems to recommend improvements to operation to ensure increased reliability

**LyondellBasell – La Porte Operations**

*August 2018 – December 2018*

**Process Engineering Co-Op**

*La Porte, TX*

- Developed project scopes for and initiated execution of 8 *safety, optimization, and efficiency related projects* during a 3 month term

## LEADERSHIP EXPERIENCE

**Chevron Phillips Chemical Company, Cedar Bayou Plant**

*June 2020 – July 2023*

**Plant Digital Transformation Liason, New Hire Board Member, and Recruiting Team Member**

*Baytown, TX*

- Actively represented the plant at the corporate level to bring new systems and optimization technologies to the facility
- Represented CPChem at Purdue as a University Recruiting Team Member
- Moderated a panel on data analytics in chemical manufacturing at an industry summit (60+ attendees)

## OTHER INVOLVEMENT

- DR Delicacy (Truffle and Fine Foods Importer in Houston, TX) Product Developer, *Sep 2021 – June 2022*
- Chevron Phillips Innovation and Improvement Champion, *Apr 2021 – July 2023*
- Purdue American Institute of Chemical Engineers (AIChE) Alumni Mentor, *Aug 2020 – December 2022*

## COLLEGE HONORS, AWARDS, AND INVOLVEMENT

- Dean's List/Semester Honors, *All Semesters*
- Purdue Engineering Industrial Roundtable Scholar, *Aug 2019*
- Earl and Jean Schrader Scholar, *Aug 2018*
- AIChE Donald F. Othmer Academic Excellence Award, *Nov 2018*
- Purdue AIChE Vice President, Treasurer, Technical Coordinator, *Aug 2016 – May 2020*

## SKILLS & TECHNICAL COMPETENCIES

- Experienced in Aspen Plus, Seeq, Power BI, Python
- Proficient in Power Automate, C, HTML/CSS, MATLAB
- 3 Certifications in Hazard Recognition and Mitigation and Safe Design totaling 10 hours of professional development from AIChE: Safety and ChE Education