

Wilbur Acharya



wacharya@uno.edu



New Orleans, LA 70148



(504) 478-5674



linkedin.com/in/wilburacharya

EDUCATION

The University of New Orleans

Bachelor of Science in Mechanical Engineering

Minor in Software Engineering and Mathematics

New Orleans, LA

Cumulative GPA: 3.96/ 4.0

August 2019 – May 2023

EXPERIENCE

Mechanical Engineering Intern

Bayer U.S

June 2021 – Present

Luling, LA

- Trained seven site operators in using Asset Performance Monitoring software for conducting operator rounds
- Coordinated with Electrical Engineers for installation of 105 AMS Emerson 6500 vibration monitoring system
- Identified Process Safety Materials analyzing Engineering Flow Diagrams for management of hazardous chemicals
- Migrated engineering drawings and spec sheets to Autodesk Vault and Smart Plant Instrumentation software

Research Intern

Energy Conversion and Conservation Center (ECCC)

Jan. 2020 – June 2021

New Orleans, LA

- Conducted study on superhydrophobic surfaces to achieve up to 10 times more heat transfer inside paper dryers
- Analyzed five different superhydrophobic coatings and their susceptibility to extreme temperature up to 105 °C
- Modeled experimental setup using SolidWorks for prototype design and laboratory experimentation

Network Technician

The University of New Orleans

Nov. 2019 – June 2021

New Orleans, LA

- Maintained, configured, and provided wired and wireless network support around the campus
- Swapped more than 1000 connections and about 50 switches to increase network efficiency by about 25%

PROJECTS

Paper Dryer Siphons

Jan. 2020 – Aug. 2020

- Designed an experimental prototype of paper dryer to study flashing phenomena and air-water flow inside siphons
- Optimized the experiment and achieved the objective of 50% reduced energy consumption using compressed air
- Acknowledged in the paper, “**Experimental Study of Void Fraction Effect on Flow Continuity In A Siphon**” published by the American Society of Thermal and Fluids Engineers

Robot Design

Nov. 2019 – Feb. 2020

- Worked with four team members to build a robot tasked to pick up items of litter and dump them in separate bins
- Designed feasible acrylic chassis of the robot for IEEE Region 5 robotics competition using CAD modeling
- Implemented Fused Deposition Modeling (FDM) to print the parts and assemble components like Raspberry Pi

Gravity Propelled Car

Nov. 2019 – Dec. 2020

- Designed a CAD model of 1/64 scaled assembly vehicle using SolidWorks
- 3-D printed lower chassis, upper body, and assembly components using Stereolithography (SLA) technique
- The vehicle traversed and completed four different HotWheels Car tracks including two loops and inclines

CAMPUS INVOLVEMENTS

Vice-Chair: IEEE Student Section; IPC Student Section

Aug. 2021 - Present

Treasurer: NACE-UNO Student Section

Jan. 2020 - Present

Member: UNO Robotics Club; ASME; AADE; SPE; Tau Beta Pi

TECHNICAL SKILLS

- o **Software:** SolidWorks; Fusion 360; AutoCAD; Autodesk
- o **Languages:** Java; Python; HTML; CSS; C++
- o **Machines:** Band Saw; Bench Drill Press; Power Tools

AWARDS AND HONORS

- o **Homer-Hitt Scholarship (Full-Ride)**
- o **TOLMAS Scholars Research Grant**
- o **Richard M. Dannenberg Scholarship**