

RAMESES MENDOZA

MECHANICAL ENGINEERING STUDENT



EXPERIENCE

ELECTRIC BICYCLE CONSTRUCTOR

Independent Project | Elmwood Park, IL
Sep 2020 – Mar 2021

- Designed, built and tested an electric bicycle using OTS parts (12v motorcycle batteries, 500W DC motor, 25H sprockets, steel sheet metal, potentiometer, etc.).
- Calculated necessary power and torque needed to carry itself and rider at 15 mph.
- Manually machined custom metal augmentations, then welded them to a recycled frame.
- Cut, stripped and routed cables to shrink profile and increase aesthetic appeal.

SPHENIX RESEARCHER

UIUC Nuclear Physics Group | Urbana, IL
Jun 2022 – Jul 2022

- Used Python to discover, solve and visualize an inconsistency in the energy readings between the 6000+ blocks of the sPHENIX Detector's electromagnetic calorimeter, increasing the accuracy of the machine.

SYSTEM TECHNICIAN

Sunshine Home Care | Chicago, IL
Jun 2024 – Jan 2025

- Converted electronic data, forms and records from local to cloud servers, promoting efficiency and accessibility of documents on the field.
- Modernized computer hardware and operating systems
- Authored and managed the company domain, emails and website, increasing traffic to the firm.
- Fulfilled secretarial duties during the company's Medicare Provider Re-Certification Survey, accelerating a week-long process into 2 days for all involved.

COURSE ASSISTANT (CS101)

Siebel School of Computing and Data Science | Urbana, IL
Sep 2024 – Dec 2025

- Directs labs and advises students during office hours.
- Provides consultations to department using feedback from students after novel test review sessions to alter future procedures.
- Holds unscheduled private sessions on student request.

CONTACT

☎ (773) 520-8423

✉ mail@rameses.me

✉ ramesesm@illinois.edu

🌐 www.rameses.me

EDUCATION

GRAINGER COLLEGE OF ENGINEERING, 2027

BS in Mechanical Engineering

GIES COLLEGE OF BUSINESS, 2027

Minor in Business

James Scholar
GPA 3.6

SKILLS

- Accounting
- CAD (Fusion 360)
- Communication (Electronic, Telephone)
- Computer Technology
- Data Analysis
- Data Entry
- Electronic Repair
- Microsoft Suite (Excel, Word, PowerPoint)
- Manual Milling
- Minute Taking
- Parliamentary Procedure (RONR)
- Python (Matplotlib, Numpy, Pandas, Sympy)
- Radio Transmission
- Soldering
- Welding
- Writing (Reports, Emails, Letters)