# Riley Oest

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## Experience

Machine Learning Engineer

## **LSU Mathematics Department**

September 2023 - Present

· Building algorithmic investment strategies for options trading

## **Applied Research Scientist**

#### **LSU Mathematics Department**

January 2023 - September 2023

- Developed source code for an artificial neural network with Python libraries
- Used machine learning to develop a predictive model for non-invasive prediction of the inside of a horse's hoof
- Conducted data preprocessing from data generated by infrared sensors
- Advised by a graduate research assistant in veterinary and clinical science and a postdoctoral researcher in mathematics
- Co-author of the research paper (Still in progress)

### **Python Developer**

#### Harvard GAMI (Global Alliance for Medical Innovation)

August 2022 - May 2023

- Developed Python code for data preprocessing and organization
- Worked with kinematic patient data generated by the Test Flight app via iPad drawings
- Wrote functions to quantify digitized drawings so a machine learning algorithm could distinguish them between patient and control groups
- Evaluated functions and features based on their ability to distinguish between patients and controls
- Presented weekly progress to the team
- Research Paper

#### **LSU Information Technology Services**

September 2021 - September 2023 (Seasonal)

- Assisted users with technology-related issues via phone and in-person interactions.
- Experience with LSU database
- Logged tickets to track customer troubleshooting history

#### **Applied Research Intern**

## **LSU Mathematics Department**

May 2021 - August 2021

- Worked with data acquired from DXA scans from Pennington Biomedical Research Center to predict BMI (Body Mass Index)
- Created a predictive model using machine learning algorithms that accomplishes the accuracy of a DXA scan with a smartphone application
- Worked alongside a team of both undergraduate and graduate students guided by an advisor
- Research Paper

#### **General Maintenance**

#### **STC Investments**

June 2019 - August 2022 (Seasonal)

- · Mowing and landscaping crew
- Painted walls and trim
- Repaired minor damages to rental properties

#### **General Contractor**

## **Collins Excavating**

May 2022 - August 2023 (Seasonal)

- Excavating
- Demolition
- · Sewer and water line replacement
- Concrete (flat-work)

#### Mower & Artist

#### **Macomb Country Club**

## May 2020 - August 2020

- Mowing crew
- Performed live music at the restaurant

#### Cashier

## Farm King

May 2018 - August 2020

- Stocked goods
- Took orders and operated the cash register
- Helped customers to their vehicles with heavy items

## Score Keeper

## **Macomb High School**

August 2017 - May 2020

• Took admissions / operated scoreboards for high school games

## Education

## Louisiana State University

#### **Bachelor's in Computer Science**

## **Concentration in Data Science & Analytics**

## **Minor in Mathematics**

- Expected Graduation: December 2024
- GPA = 3.2 / 4.0

## Macomb High School

## **High School Diploma**

- Graduated: May 2020
- GPA = 3.4 / 4.0

## Volunteering

## St. Paul's Church

## **Catholic Confirmation**

## May 2015 - August 2016

• 50 volunteer hours

## Interests

## **Coding Languages**



Python



Java



C++

## **Programming Interests**

- Artificial Intelligence
- Algorithmic Trading
- Medical Research Tools

## Guitar

• I've had a passion for playing guitar since 2018

Riley Oest: rileyoest13@gmail.com: (309)-259-0363



LinkedIn



Handshake



GitHub