

Russell Weas

russweas@gmail.com (205) 837-0999 russweas.com github.com/rweas linkedin.com/in/rweas

EDUCATION

The University of Alabama Tuscaloosa, AL

Master's of Arts in Mathematics May 2022

Bachelor of Science in Computer Science

Bachelor of Science in Mathematics

Minor in Randall Research Scholars Program

GPA: 4.00/4.00

EXPERIENCE

Monopole and Exotics Detector at the Large Hadron Collider (MoEDAL) Tuscaloosa, AL

Undergraduate Research Assistant January 2019–Current

- Work directly under faculty in UA's Department of Physics with multinational research group
- Develop image analysis software to identify and report ionizing particle collisions with polymer sheets
- Administrate dedicated HPC servers used by graduate students and professors for machine learning and simulations
- Setup PyTorch, JupyterHub, and TensorFlow 2.0 server environments using Docker images and containers
- Apply unsupervised fully convolutional autoencoder models to reconstruct and analyze images

EcoCar Advanced Vehicle Technology Competition

Tuscaloosa, AL

Connected and Autonomous Vehicles Subteam Member

August 2019 – Current

- Develop roadway object recognition software for automated vehicle technology
- Collaborate with team members to organize data pipeline and version control
- Build Faster R-CNN model on 100,000 image dataset in Google Cloud Collaboratory server
- Train other members on machine learning theory, best practices, and techniques

Randall Research Scholars Program

Tuscaloosa, AL

Lab Manager

January 2019–Current

- Administrate Linux servers and lab installation in the only student-run computer lab at UA
- Coordinate with UA Honors College staff and student researchers to organize annual research presentations
- Represent the Honors College as a recruiter for the Randall Research Scholars Program during student visits
- Configured and installed new Microsoft Active Directory server to manage lab authentication
- Lead development of new MVC C# web application for annual live research presentation

College of Continuing Studies

Tuscaloosa, AL

Web Development Intern

August–December 2018

- Maintained and expanded an MVC C# application for managing purchases and subscriptions
- Resolved bugs and defects identified by customers and other developers

SKILLS

Elective Coursework: Signals & Systems, Modern Physics

Scripting Languages: Python, JavaScript (NodeJS), MATLAB, R

Fullstack Languages: C#, Java, PHP, HTML5, JavaScript (ES6), CSS3, JSX

Compiled Languages: C++, Rust, C, FORTRAN

Libraries/Frameworks: TensorFlow, Keras, Pandas, NumPy, C# MVC6, Entity Framework, Laravel, Vue JS, React

Tools/Technologies: .NET Core, Windows Server, Git, Docker, AWS, Hyper-V, Docker