Logan O'Neal

865-318-1207 | loneal7@vols.utk.edu | loganoneal.com | LinkedIn | GitHub

EDUCATION

The University of Tennessee Knoxville, TN
Bachelor of Science in Computer Science *Graduating Dec 2023*

- **4.0/4.0**
- Haslam Scholars Program
- Cook Grand Challenge Engineering Honors Program
- Mensa Foundation and Burger King Scholar

WORK EXPERIENCE

Undergraduate Research Assistant June 2020 - Present
The University of Tennessee *Knoxville, TN*

- Developed and managed backend geolocation data collection system using Firebase and Scikit-Learn in order to analyze the carbon savings caused by electric bicycle use in urban environments
- Increased machine learning model precision by 15% using Python, Scikit-Learn, and Firebase ML SDK

High Performance Computing Intern May 2019 - August 2019
Oak Ridge National Laboratory, Leadership Computing Facility *Oak Ridge, TN*

- Developed a deep learning application using Python, Tensorflow/Keras, and the C++ QT graphics library currently used to educate approximately 4000 students per year about the power of artificial intelligence.
- Collaborated with a team of 6 to write paper on the impact of artificial intelligence and document the project, reporting directly the Director of the National Center for Computational Science.

Web Developer August 2019 - Present
Smoky Mountain Jeep Invasion Developer and Freelance Worker

- Developed full-stack web applications for small businesses, focused on increasing client interactions, search engine optimization, and sales, generating $8,500 in revenue.
- Built an e-commerce system selling over 10,000 tickets per year using NodeJS, Square, and Express.

PROJECTS

The Environmental Impacts of Cloud Computing| *Python, Shodan API, Web Scraping* December 2020 - May 2021

- Used the Shodan API and Python to scrape IoT devices and websites in order to create a dataset of cloud computing centers and their respective power sources
- Implemented geo-spacial analysis to compute the net carbon impact of cloud computing centers in the US

E-Bike ML Study | *Python, MySQL, Firebase, Google Cloud* June 2020 - Present

- Designed a machine learning model using Python and Scikit-Learn to make predictions about a geo-spacial dataset
- Automated time consuming tasks, with one optimization (web scraping) saving the team over 80 hours of work.

Smoky Mountain Jeep Invasion Website | *NodeJS, MySQL, Square API, Git* August 2019 - July 2020

- Developed front-end and back-end of website
- Integrated an automated email system and SEO techniques to increase user interactions by 150%.

ORGANIZATIONS

UTK Machine Learning Club - Executive Team August 2020 - Present
The University of Tennessee *Knoxville, TN*

- Recruited 19 active members to the club and attended a weekly reading group to discuss recent ML research

FIRST Robotics - Team Captain and Programming Lead August 2016 - May 2019
FIRST Robotics *Knoxville, TN*

- Expanded our program from 20 to 65 members and led the fundraising of over $85000 in a year

CodeTN - Team Lead August 2017 - May 2019
L&N STEM Academy *Knoxville, TN*

- Led a team of 6 members to develop full stack web applications with an emphasis in solving local problems

Tennessee Capital Markets Society *Member* | **Collegiate Entrepreneurs' Organization** *Member*