

Sagar Ghimire

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EDUCATION

Claflin University

Expected Graduation Date: May 2021

Bachelor of Computer Science (Minor in Mathematics and Cyber Security) | GPA: 3.98 / 4.0

Completed Courses: Software Engineering | Data Structure and Algorithm | Linear Algebra | Calculus-III | Data Analysis

PROFESSIONAL EXPERIENCES

Data Science Intern, Dominion Energy, Virginia

November 2020 – Present

- Extracting, loading, formatting data, and annotating image to build models for predicting anomalies in the solar cell
- Analyzing and preparing thermal image data to predict anomalies in solar cell present in the solar farm

Innovation Team Research Intern, Dominion Energy, Columbia, South Carolina

June 2020 – August 2020

- Recommended strategies and methodologies on how Dominion Energy could adopt Building Integrated Photo Voltaic technology to improve the usage of solar energy
- Researched solar cells integration process and required materials for Photo Voltaic cells
- Collaborated with innovation team interns to discuss, understand, and document the optimal design, location, and installation of Building Integrated Photo Voltaic system

Research Intern, Career Pathways Initiatives, Orangeburg, South Carolina

June 2019 – September 2019

- Performed research on how Blockchain technology can be designed to perform covert communication by applying Steganographic or Cryptographic techniques
- Examined various encryption algorithms (RSA and AES) for big data, Blockchain architecture, and various consensus mechanisms such as Proof of Work and Proof of Stake

Undergraduate Research Intern, School of Computer Science, Claflin University

May 2019 – August 2019

- Designed an algorithm to solve the single variable equation using Newton-Raphson, Secant, and Regula-Falsi method
- Analyzed the complexity of implementing the designed algorithm for different numerical methods in Maple and Excel
- Wrote and submitted the paper to International Conference on Technology in Collegiate Mathematics for publication

PERSONAL PROJECTS

Diabetes Prediction (<https://predictdiabetis.pythonanywhere.com>)

- Developed a machine learning model to predict the probabilities of having diabetes in person
- Applied Random Forest Classifier algorithm and achieved an accuracy score of 0.793 applying hyperparameter tuning using randomized search cross validation method
- Created web application for this project using Django and Python

Titanic Survival Prediction (<https://www.kaggle.com/ghsagar/titanic-survival-with-feature-engineering?scriptVersionId=37167152>)

- Developed a machine learning model to predict survival chances of passengers who travelled on Titanic ship
- Utilized Sklearn, Pandas, and Numpy libraries for data pre-processing and visualized using data exploratory techniques
- Achieved accuracy score of 0.77511 applying Random Forest and XGBoost machine learning algorithm

Website Development, <https://steamlogic.pythonanywhere.com/> || (<https://github.com/ghsagar/steamlogic>)

- Worked with group of three leading back-end development using Django framework to develop a website focused on increasing diversity in technology fields among African American students
- Connected MySQL for database management and utilized GitHub for team collaboration and deployment

LEADERSHIP AND AWARDS

- Vice President, National Society of Black Engineers, Claflin chapter August 2019 – Present
- Secretary, Claflin's Global Student Organization July 2019 – Present
- Carolina Clusters' Creative Project Award April 2019
- President's Gold Medallion, Claflin March 2019
- Presidential Scholar, ACT Honors College, Claflin University 2017 – present

TECHNICAL SKILLS:

- Languages:** Python, Java, JavaScript, CSS, HTML5, SQL, PostgreSQL, and Maple
- Skills:** Data Extract, Load, and Transfer, Machine Learning, Natural Language Processing, and Data Analysis
- Tools:** Django, Git/ GitHub, Google Collaboratory, Jupyter Notebooks, cPanel & WHM, and VestaCP