

SOUMYAJYOTI DUTTA

College Station, TX | <https://www.linkedin.com/in/soumyajyoti-dutta-4a4177173/>
(979) 326-2896 | soumyajejyoti1998@gmail.com

EDUCATION

Master of Science in Computer Engineering May 2024
Texas A&M University, College Station, TX | Department of ECE
GPA: 4.0 / 4.0
Relevant Coursework: Engineering Applications in Genomics (Statistical Background, Pattern Recognition, Classification, and Clustering) **Analysis of Algorithms, Machine Learning Engineering**, Adaptive Control, ML Based Cyber Defenses

Bachelor of Technology in Electronics and Communication Engineering May 2021
SRM University, Chennai, India | Department of ECE
Grade: 89.54 / 100 | First Class with Distinction

PROFESSIONAL EXPERIENCE

Cognizant Technology Solutions Calcutta, India
Junior Software Engineer August 2021-August 2022

- **Service Line: App Development and Maintenance**
- Developed multiple intra-organizational websites/portals
- Built website components and contributed to the Cognizant codebase - enhancement of shift tracker
- Managed IT support and software solutions of an important client organization (**Logistics / Supply-chain support team**)
- Gained experience in development using **HTML, CSS, JavaScript, SQL, SQL Server, ServiceNow and Splunk services**

Cognizant Technology Solutions Bengaluru, India
Intern February 2021-June 2021

- **Service Line: App Development and Maintenance**
- Achieved early graduation and was **promoted to the full-time position**
- Created web applications using **HTML, CSS, JavaScript, React, C# and SQL Server (Web Development)**
- Observed and analyzed deployment of applications and followed agile project management
- Got introduced to Scrum Project Management, Software Lifecycle, Cloud Computing and Microservices

EXPERTISE

Technical: Python | NumPy | Pandas | Matplotlib | Seaborn | **TensorFlow** | Sci-kit Learn | **SQL** | SQL Server | **MATLAB** | C++ |
Data Structures and Algorithms | OOPS | **Linux/Unix** | Tableau | HTML | CSS | JavaScript | **Git** | Splunk | MS Office

Soft Skills: Leadership | **Analytical/Data Driven Solutions** | Collaborative Mindset | Communication | Technical Writing

ACADEMIC PUBLICATION

Detection and Analysis of Carotid Artery USG Images (TensorFlow, MATLAB, Python - Pandas) Spring 2022

- Conceptualized and implemented an effective framework leveraging Deep Learning to examine human carotid artery ultrasound images for coronary disorders and detect if any plaque formation is present (**ML/Data Science Project**)
- Tested the framework on real-time ultrasound images of patients, helping medical staff detecting plaque formation
- Data driven analysis of filters (**MATLAB - Noise Reduction Filters, MSER**) and data visualization
- Presented research paper at **6th Kuala Lumpur International Conference on Biomedical Engineering 2021**
- Paper Title: **Analysis of Carotid Artery Ultrasound Images Using Gabor Filter, Maximally Stable Extremal Regions and Convolutional Neural Network** | https://link.springer.com/chapter/10.1007/978-3-030-90724-2_2

PROJECTS (GitHub: <https://github.com/Soumyajyotidutta>)

Tiller Bud – A Plant Genomics Research Project Spring 2023

- Currently in research and development phase
- Proposed the use of joint graphical lasso with fused penalty for identifying genes responsible for phenotypic differences in two Arabidopsis Thaliana flowering phenotypes

Data Analysis Projects (Python, Pandas, NumPy, Seaborn, Matplotlib, Sci-kit Learn, TensorFlow) Spring 2023

- Implemented **Maximum Likelihood Estimation**
- Performed analysis with help of **k-nearest neighbor algorithm**
- Handled clustering problems through the implementation **k-means clustering**
- A sample project using Olympics dataset: <https://github.com/Soumyajyotidutta/MLProjects>

Game Genie – A Responsive Gaming Website (HTML, CSS, JavaScript, C#, SQL Server) Fall 2021

- Developed responsive landing page and multiple games
- Integrated back-end using C# and SQL Server
- Deployed front-end of the project at <https://game-genie.netlify.app/>

ADDITIONAL EXPERIENCES AND ACHIEVEMENTS

- **Leadership Experience: Technical Coordinator, Student Research Week 2023, Texas A&M University** Fall 2022
- National Instruments Innovation Centre, Greater Noida, India | Internship | Domain: LabVIEW Summer 2020
- National Thermal Power Corporation, Farakka, India | Internship | Domain: Sensor Operations / IT Summer 2019