



## OBJECTIVE

*To advance my career with a leading organization that will utilize my extensive software engineering, testing, data science and information security knowledge while also allowing me to develop further as a professional*

Proven talent for aligning project objectives with established and emerging security integration paradigms to achieve optimal results with minimal challenges. Growth-focused leader with expertise spanning software engineering, system design, data science/engineering, project management, critical thinking, problem-solving, and a team player. Exceptional professional with keen interpersonal, communication, and task prioritization skills.

## PROFESSIONAL EXPERIENCE

### WORKONWORD

#### **DATA SCIENTIST** MAY 2024 – PRESENT

- Building ETL pipelines for Generative AI products and EDA using Tableau to measure KPIs.
- Designed and implemented Voice search and AI Chatbot enabling customers navigate key information without a click of a button increasing user interaction by 200% over 3 months of launch.
- Working with IT, DevOps team to ensure quality assurance and data integrity.
- Stress testing APIs and system integration ensuring data security and managing security infrastructure.

### ANTI-PHISHING WORKING GROUP, REMOTE, OCTOBER 2020 - PRESENT (CONTRACT)

#### **SOFTWARE ENGINEER / DATA ENGINEER**

- Formed Rest APIs for Cryptocurrency Working Group clients from both the academia and industries.
- Garnered, reviewed, and analyzed data and updated a database of approximately 1.2million BTC wallet addresses used for scams and ransomware.
- Tested systems to measure reliability and efficiency ensuring 99.999% uptime for clients.
- Produced specifications, determined operational feasibility, and integrated software components into a fully functional software system.
- Created data lake in snowflake to store and process raw data into aggregated form for users.
- Used Apache Airflow to manage workflow schedule tasks, CI/CD on AWS

### ROBBIE AI (ATENTO CAPITAL PORTFOLIO)

#### **MACHINE LEARNING ENGINEER/ DATA SCIENTIST** MAY 2023 – APRIL 2024

- Creating dashboards using PowerBI to measure efficiency and failure rates using Apache Airflow to build data pipelines.
- Developed ML models using computer vision technology to identify different body structures and created artificial neural network and deep learning to detect pain level using FACS and PSPI scores.
- Increased accuracy scores by at least 23% for the pre-existing production models
- Implemented a real-time video processing pipeline by configuring Azure Blob Storage for live video feed storage and integrating Apache Kafka for streaming the data to deep learning models, optimizing performance based on live action analysis.

### ATENTO CAPITAL

#### **INTERN**, JUNE 2023 – AUGUST 2023

- Working closely with Partners and C-level employees to conduct market research to identify investments opportunities in Fintech.
- Produced intuitive dashboards in PowerBI which can be fed any financial data with key parameters to understand performance enabling decision makers in investment process.

---

THE UNIVERSITY OF TULSA, TULSA, OK

**RESEARCH ASSISTANT / DATA SCIENTIST**, JANUARY 2018 - PRESENT

- Conduct extensive research and analysis into cryptocurrencies, scams, fraud detection, price manipulation, and the lifespan of coins and exchanges.
- Script Rest APIs and develop web crawlers while upholding research data infrastructure security.
- Synthesize and scrutinize complex data and generate pipelines for measurement studies.
- Conduct data analytics, statistical analyses and dashboards for EDA using Power BI, Stata, Python, R and review research literature to summarize and present findings.
- Generate comprehensive documentation consisting of datasets and analytical findings.
- Research financial markets and cryptocurrency market to understand market trends and build predictive models to measure exchange and cryptocurrency failure.
- Conduct root cause analysis and publish quality research papers.

**ADJUNCT FACULTY**, MAY 2022 - APRIL 2023

- Prepared and conducted instructional presentations for CYB 7163, Cyber Security Practicum.

**GRADUATE TEACHING ASSISTANT**, AUGUST 2021 – MAY 2024

- Deliver lessons in two courses, the Fundamentals of Algorithm and Computer Applications (Java and Python) and Introduction to Programming and Problem-Solving

PRICEWATERHOUSECOOPERS, BIRMINGHAM, UK, FEBRUARY 2015 - DECEMBER 2016

**IT RISK ADVISORY ASSOCIATE**

- Participated actively in the delivery of IT risk advisory services comprised of risk assessments, security reviews, compliance assessments, and IT governance assessments.
- Studied and evaluated client IT environments to ascertain risks and control gaps and provided recommendations for remediation solutions.
- Test systems to validate compliance according to local regulations.
- Cross-collaborated with multiple teams to provide IT risk advisory services, prepared reports and presentations, and maintained knowledge of current regulatory and industry requirements.

---

## EDUCATION AND CREDENTIALS

---

PHD IN COMPUTER SCIENCE, EXPECTED GRADUATION DECEMBER 2024

*The University of Tulsa - Tandy School of Computer Science, Tulsa, OK*  
GPA 3.67

POST GRADUATE DEGREE IN COMPUTER SCIENCE, NETWORK, AND DISTRIBUTED SYSTEMS, 2014

*University of St. Andrews - Department of Computer Science St. Andrews, Fife, UK*  
Graduated with GPA 3.3 Equivalent

UNDERGRADUATE DEGREE IN COMPUTER APPLICATIONS, 2012

*West Bengal University of Technology, Kolkata, India*  
Graduated with GPA 3.3 Equivalent

---

## TECHNICAL EXPERTISE

---

LANGUAGES: R, Python, Java, C/C++, MATLAB, Latex, JavaScript, ReactJS, Solidity, SQL, No-SQL

TOOLS: Power BI, Tableau, Linux, Azure, AWS, Kafka, GCP, Web3, Docker, Selenium, PyTorch, Tensorflow, Keras, PyCaret, Figma, Jira, Notion, Redshift, Athena, Sagemaker

SKILLS: Statistics, Survival Analysis, Time Series Analysis, ML, NLP, Quantitative Research, GraphQL, Rest API