+353 851060434 srahulseth7@gmail.com

RAHUL SETH

GitHub LinkedIn Dublin, Ireland

EDUCATION

Trinity College, Dublin **Ireland**

BAI Computers and Electronics Engineering *2018 –2022*

Dissertation: "Surveying Long-Term Cryptographic Keys in Ireland" | *GitHub*

- Developed, refactored code for a network data application to scan, mine data from 20,000 Irish mail servers
- Researched encryption key sharing in mail server infrastructure, leveraging Python for data analysis and development on Linux
- Analyzed JSON metadata using Python on Linux, presenting results with custom node-based graphs, showing 52% public key sharing

WORK EXPERIENCE

Baker Hughes **Ireland**

Software Engineer *Mar'23 – Present*

- Worked in a cross-functional team to revitalize legacy oxygen sensor software; focussed on enhanced human-machine interface (HMI)
- Managed 20+ SW requirement changes as liaison between product management and development with a customer centric approach
- Designed, developed using C (OOP) with over 17 features like password entry, validation, numeric input, customizable dashboard
- Implemented DevOps CI/CD workflow utilizing Parasoft on GitHub, ensuring MISRA compliance; reduced rework by 30%
- Developed Python scripts to convert images to C hex arrays, saving 2 hours/feature. Standardized design practices across the SW team

Graduate Software Engineer *Aug'22 – Mar'23*

- Leveraged Win32 to architect, develop an HMI emulator as a Windows app; resulted in 40% acceleration in feature dev process
- The app was selected for client training and deployed in 3 projects; established a uniform repository and enhanced working practices
- Optimised Agile board by decomposing EPICS, user stories into tasks and coordinating sprints; boosted timely delivery by 25%
- Documented test cases and code architecture, contributed to design reviews and handled chaning of requirements in SW
- Contributed to system functionality and user interaction by integrating bootloader, linking Data Manager with HMI

Ericsson **India**

AI/ML Intern *Jun'21 – Aug'21*

- Analysed large datasets; applied ML models like Linear Regression, Decision Trees, and AdaBoost for predictive analysis
- Utilised 5 performance metrics including recall, f1score, precision, accuracy and ROC curves to assess the performance
- Applied K-Means algorithm on the historical IT dataset; hyper-tuned the model using elbow curves, and silhouette method(s) to identify optimal clusters

Lepton Software **India**

Market Research Intern *Jun'19 – Aug'19*

- Leveraged advanced Excel functions like vlookups, pivot tables, and sorts to perform in-depth analysis of 5G market data
- Presented to stakeholders a strategy on how Lepton can differentiate itself from competitors by leveraging services they offer

PROJECTS AND ACTIVITIES

BCG Gamma Experience **Virtual**

Data Science *Jun'23*

- Gained insight into enhanced decision-making by using Python visualize KPIs such as churn, forecasting, factors influencing chrun
- Analyzed data, performed feature engineering, and generated reports for real-world client projects, extracting insights from metadata

Formula Trinity AI **Ireland**

State Estimation and Path Planning *Nov'20 – May'22*

- Developed Python-based simulator to visualise workings of Kalman, Particle filters in analyzing car sensor data like speed, yaw angle
- Integrated estimation algorithms for localizing, mapping a racing map, enabling path planning team to determine the racing line
- Implemented agile methodologies, leveraged Git for code management, established workflows; enabled test driven development

Email Client

- Designed an email client for macOS (Unix) architectures; incorporated features like login, search, compose and schedule send
- Implemented the backend and API calls using Python and utilised Kivy for GUI/UI design

SKILLS

Programming: Python, C, C++, JavaScript, SQL, XML, Git, Matlab, Verilog, R, Static Analysis, TeX

Technologies: IAR, Parasoft, PostgreSQL, Visual Studio, Linux, Wireshark, SPSS, Protoge, MS Office, AWS EC2, Docker