RAHUL SETH

□ +353 851060434 | @ srahulseth7@gmail.com | in LinkedIn | • GitHub | • Dublin, Ireland

EDUCATION

Trinity College, Dublin Ireland

BAI Computers and Electronics Engineering

2018 - 2022

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

- Developed a network scanner to identify and survey mail servers in Ireland; mining their cryptographic data
- Extracted TLS/SSH session metadata using custom-made JSON schema and processed it using Python
- Modelled public key sharing for 20000 hosts across all standard ports by clustering on SHA-256 fingerprint

WORK EXPERIENCE

Baker Hughes Ireland

Software Engineer

Mar'23 - Present

- Led the modernization of a legacy oxygen sensor by spearheading the design and development of an enhanced UI/UX, including a sophisticated LCD interface with intuitive navigation and robust code architecture.
- Initiated the implementation of CI/CD with Parasoft on GitHub, automating code analysis and significantly reducing rework by 29%.
- Enhanced system functionality and user interaction by integrating the bootloader and linking Data Manager with HMI.
- Established standardized product design practices with other Engineers, developing a globally accessible Python-based icon library to unify visual elements across all products.

Graduate Software Engineer

Aug'22 - Mar'23

- Created a HMI emulator for debugging, lauded by stakeholders. Reduced hardware reliance, accelerated feature dev, and chosen for client training.
- Automated image-to-hex conversion and project builds using Python, ensuring seamless feature development; Saving 2 hrs per feature
- Optimised Agile boards by decomposing user stories into tasks and coordinating sprints; increased productivity by 8%.

Ericsson India
AI/ML Intern Jun'21 – Aug'21

AUML INICH

- 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 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 Virtual

Data Science

Jun'21 **–** Aug'21

- Enhanced understanding of problem-solving processes and working with challenging data analysis tasks.
- Developed practical experience in business problem framing, exploratory data analysis, feature engineering, predictive modeling, and turning insights into business decisions.

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 UI design

Formula Trinity Ireland

State Estimation and Path Planning

Nov'20 – May'22

- Implemented Kalman and Particle Filters to minimise data noise and localise racing map for usage by other teams.
- Led state estimation team of 5; utilised data from 3 sensors on the autonomous car to determine the car's position on tracks.

SKILLS

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

Technologies: GitHub, IAR, Parasoft, PostreSQL, Visual Studio, Linux, Wireshark, SPSS