

## SUMMARY

Software Engineer with proven leadership bridging embedded SW (STM32, Modbus/BLE) and intuitive UI design. Skilled in collaborating with product management and HW teams to deliver high-impact releases and enhanced user experiences under tight deadlines

## WORK EXPERIENCE

### Baker Hughes

Software Engineer

India

Sep'23 – Present

- Relocated from Ireland to India, taking on leadership for 1 project and consulting responsibilities for 3
- Led product release & managed technical delivery across 4 projects in 2 years; contributed to PDRs, SRSs, & implementation
- Standardized 10+ hygrometry algorithms and created reusable documentation for future product development
- Spearheading frontend design for a state-of-the-art hygrometer, leveraging TouchGFX & Figma to deliver a modern, interactive UI
- Created tasks in Micrium 3 to integrate TouchGFX with the application; gained exposure to RTOS operations
- Authored 4 design records in 1 year, spanning diverse topics including proprietary algorithms to image conversion scripts
- Led DevOps initiatives; integrated Parasoft test framework using GitHub Actions, & optimized build automation using scripts

### Global Strategic Law Council

Pro Bono Consultant

India

Jan'25 – Present

- GSLC is an NGO empowering communities & advancing social impact; providing pro bono law aid to those affected by climate change
- Developed an AI-based case summarizer powered by OpenAI, hosted on a React-based website, supporting GSLC's legal workflows

### Baker Hughes

Software Engineer

Ireland

Aug'22 – Aug'23

- Joined as a Graduate Software Engineer and was rapidly promoted to SWE 1 within 5 months
- Part of smart analyzers projects; worked in a hybrid Agile environment & used Agile tools for feature breakdown
- Developed backend simulation services using Python, optimizing data processing and automation pipelines
- Created the product line's first icon-based GUI, optimized for small monochrome displays; reduced user errors by 30%

### Ericsson

AI Intern

India

Jun'21 – Aug'21

- Implemented a clustering-based query classifier to categorize internal IT requests, enabling efficient routing and resolution of issues
- Implemented NLP preprocessing, TF-IDF vectorization (Scikit-learn & NLTK), followed by k-means clustering for query classification

## KEY PROJECTS

### HygroPro XP - Smart Moisture Analyzer

Lead Engineer

India

Jan'24 – Oct'24

- Took over mid-project after lead's departure, launched 2 major releases; \$500K generated within 6 months
- Led a team of 3 developers, delivering 10 high-priority features and resolving 20+ bugs for the second release
- Developed Python-based data processing service for sensor analytics; reduced testing time by 1 month & improved accuracy by 15%
- Improved code modularity & application reliability by refactoring a monolithic 6000-line file; reduced its size by 33%

### XMTCpro - Smart Gas Analyzer

Consulting Engineer

Ireland, India

Aug'22 – Sep'24

- Designed & developed the complete UI/UX, encompassing 17 menu types & 12 core features; generated \$400K+ revenue in 2 months
- Partnered with product and technology teams to develop features & workflows focused on minimizing user errors
- Resolved 70+ bugs, including 40 critical issues within a focused 2-month period, significantly improving software stability
- Led SAST & OSAT reviews for 7+ software releases, ensuring compliance and owning frontend design reviews
- Oversaw static analysis (MISRA C compliance) & collaborated with an external agency to achieve SIL 2 certification

## EDUCATION

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### Trinity College, Dublin

**Ireland**

*BAI Computers and Electronics Engineering*

*2018 –2022*

- **Dissertation:** Survey & analysis of cryptographic keys on port 25 using Python to identify weak keys and improve security
- **Activities:** Indian Society, Formula Trinity, Voluntary Tuition Program
- Group project ranked Top 5 in class, advanced to EU competition. Developed a sustainable water solution for water-scarce countries

## SKILLS

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**Programming:** Python, C/C++, XML, SQL, Git, Shell/Batch, JavaScript, TeX, Static Analysis

**Technologies:** Figma, IAR, Parasoft, PostgreSQL, Linux, React, Protege, TouchGFX, Git Workflows