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RAHUL SETH

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Gurgaon, Haryana

## SUMMARY

Results-driven engineer who turns tough specs into reliable releases. In 2 years I've led teams that shipped firmware for 5 embedded products in the energy sector, owning reviews and tightening CI/CD so features hit the field faster and safer. Obsessed with removing bottlenecks, I built internal tools that cut effort by 80% and designed end-to-end UIs for 2 products in C/C++. Off the clock, I volunteer with NGOs, creating AI-powered automations that magnify their impact.

## TECHNICAL SKILLS

**Languages:** C, C++, Python, JavaScript, XML, SQL, Bash, LaTeX

**Embedded Tooling:** STM32, TouchGFX, CubeMX, RTOS, Modbus

**Frameworks/Tools:** Visual Studio, GCC, IAR, Parasoft, React, Electron, LangChain, FastAPI, Protege

**DevOps/Infra:** Git, GitHub Actions, Make/CMake, Shell/Batch, PostgreSQL, Linux/Windows, Agile/Scrum

## WORK EXPERIENCE

### Baker Hughes

#### Software Engineer

India

Sep'23 – Present

- Relocated from Ireland to India, taking on **leadership for 1 project** and **consulting on 3 others**
- 2+ years shipping C/C++ firmware across 5 embedded products; now spearheading the shift to C++ for the next-gen platform
- Architecting next-gen TouchGFX UI for 2 upcoming products; expected **20% RAM savings** and **30% fewer navigation steps**
- Standardized 10+ hygrometry algorithms into a shared library, eliminating **25% duplicate code** and trimming validation time by **50%**
- Embedded Parasoft MISRA C/C++ checks in GitHub Actions, reducing manual-review defects by **40%** and tripling build throughput
- Authored 4 design records that became team templates for algorithm architecture, deployment automation and graphics conversion

### Global Strategic Law Council

#### Pro Bono Full Stack Developer

India

Jan'25 – Present

- Developed and deployed a React + FastAPI case-summarizer that ingests legal PDFs, uses Gemini to produce digestible briefs
- Slashed attorney review time by **83%**; from 30 min to 5 min - on 20 cases each week, freeing **8 lawyer-hours weekly**
- Automated onboarding + Mailchimp sync with Apps Script, slashing spreadsheet upkeep **80%** and saving **3 hrs/week**

### Baker Hughes

#### Software Engineer

Ireland

Aug'22 – Aug'23

- Promoted** from Graduate Engineer to SWE 1 in **5 months**, outperforming a cohort of **6** peers
- Built Visual-Studio-based simulation services that replicate sensor I/O and fault states, cutting bench-test turnaround by **30%**
- Designed the product line's first icon-based UI; reduced navigation errors by **30%** and trimmed onboarding time for field techs by **4 hrs**

## EDUCATION

### Trinity College, Dublin

#### BAI Computers and Electronics Engineering

Ireland

2018 – 2022

- Dissertation:** Surveyed cryptographic keys on SMTP port 25, built Python toolchain to flag weak keys
- Activities:** VP Indian Society, Lead Engineer Formula Trinity, Lead Voluntary Tuition Program
- Capstone project ranked **Top 5 in class**, advanced to EU competition; built a sustainable water solution

## KEY PROJECTS

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### GraphicsEngine – Embedded UI Code Generator

India

*Personal Initiative*

*Mar'25 – Present*

- Conceived and led a design-to-code pipeline converting Figma SVGs into C/C++ for 128×64 LCD UIs, unifying fragmented workflows
- Implemented the generator with Python and a React + Electron front-end, packaging everything into a cross-platform executable
- Integrated 2 legacy tools (CSV & StringDot) and rolled the solution out to **3 product teams**
- Cut screen-development effort by **60%** and new-developer onboarding time by **40%**

### HygroPro XP – Smart Moisture Analyzer

India

*Lead Engineer*

*Jan'24 – Oct'24*

- Took over a stalled mid-project and launched **2 major firmware releases** that generated **\$500K in 6 months**
- Led a 3-engineer squad, shipping **10 high-priority features** and clearing **20+ critical bugs** on schedule
- Built a Python sensor-analytics microservice that cut the test cycle by **4 weeks** and boosted calibration accuracy **15%**
- Refactored a **6000-line monolith** into modular components, trimming code size **33%** and easing future maintenance

### XMTCpro – Smart Gas Analyzer

Ireland, India

*Consulting Engineer*

*Aug'22 – Sep'24*

- Led UI/UX design for 17 menus and 12 features in close collaboration with product managers and engineering
- Partnered with PC-software team to align desktop and embedded workflows; drove **\$400K+** revenue within 2 months of launch
- Closed **70+ defects** (40 critical) during a focused 2-month stabilization sprint, pushing field build stability above **99%**
- Partnered with desktop engineers to create a shared Figma component library, cutting cross-platform UI rework by **25%**
- Drove SAST & OSAT reviews across seven releases, maintained MISRA-C compliance, and coordinated SIL-2 certification audits