

# SWALEH HUSSEIN

Multiple Town Planner

## Stamp 4 Visa:

Eligible to work in Ireland without a work permit, no sponsorship required.

## Contact

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### Portfolio:

[www.bit.ly/swaleh\\_hussein-porfolio](http://www.bit.ly/swaleh_hussein-porfolio)

### LinkedIn:

[www.bit.ly/swaleh\\_hussein-linkedin](http://www.bit.ly/swaleh_hussein-linkedin)

### GitHub:

[www.bit.ly/swaleh\\_hussein-github](http://www.bit.ly/swaleh_hussein-github)

## Highlights

- Responsible for design and delivery after handover of complete FTTH towns with over 64,000 homes.
- Responsible for labor supply mobilization teams of 150–200 personnel per project for on-ground execution.
- Responsible for designing and managing up to 11 FTTH town projects at once throughout the project life cycle.

## Accomplishments

### Staff Quarterly Awards

Indigo Telecom Group Limited, Limerick, Ireland

- I continuously exceeded expectations and objectives set for me.
- Good attention to details.
- Commitment to learn new things.

**Highly adaptable and committed employee.** I take pride in my ability to think logically and deliver efficient solutions. Seasoned in overseeing complex infrastructure projects, with a strong background in project leadership, planning & design. Ambitious and adaptable Junior full-stack web developer with versatile skillset in front-end and back-end development. Proficient in UI design. Experience in integrating data storage and retrieval in back-end applications and developing Web3 decentralized apps. A good collaborator and communicator. Eager to learn and grow within a dynamic and innovative team and deliver high-quality, scalable, and secure web solutions.

## Work History

### Junior FrontEnd Web Developer

*Freelance, Limerick*

#### 2024-Jan - Current

Successfully completed the Front-End Web Development program with IBM and now freelancing as a full-stack web developer. Beginning with a solid foundation in HTML, CSS, and JavaScript, I progressed to advanced frameworks such as React.js and Node. Hands on database management expertise, encompassing Postgres SQL and MongoDB, coupled with server-side development using Express. Proficient in version control with Git, and design skills through Bootstrap, jQuery. Delving into responsive web design, I gained hands-on experience in implementing authentication and security measures, utilizing Google OAuth Credentials, Passport, salting, cookies, JSON, and session management. An addition to my repertoire includes working on Web3 decentralized apps with the Internet Computer.

- Developing reusable components using React.js.
- Developing interactive and mobile first responsive UI using JavaScript (ES6+), CSS and HTML with enhanced user experience.
- Building RESTful APIs and server-side logic with Express and testing them with Postman and using 3<sup>rd</sup> party APIs, OAuth.
- Managing code bases with code versioning tool, Git.
- Implementing robust authentication and security measures using Passport, salting, cookies, and session management.
- Hands-on experience in developing Web3 decentralized apps on the Internet Computer using Motoko.
- Integrating backend with PostgreSQL SQL or MongoDB for handling data storage and retrieval.
- Proficient in UI design with Figma for creating user interfaces for web and mobile applications.

### Multiple Town Planner

*Indigo Telecom Group Limited, Limerick*

#### 2021-Feb - 2023-Dec

Originally started as a structural analyst for fibre infrastructure readiness (FMR) where I was responsible for the structural analysis of ESB low voltage and medium voltage poles. Owing to my agility in learning and consistent delivery of high-quality outcomes, I was fast tracked to fibre planning and design. My ability to shoulder increased responsibility saw me progress to a leadership role as Fibre Planner - Town Lead. With Indigo acting as PSDP, I subsequently managed 11 towns concurrently and directed the delivery of 64,000+ FTTH homes, working closely with our clients' representatives and the build contractors (PSCS).

- Mentoring and supporting fibre planners and graduate fibre planners on BIM software and processes.
- Contributed to curating training material and knowledge documentation, facilitating training and knowledge transfer, and building onto the company's knowledge base repository.
- Responsible for tracking project progress, triggering deliverables, and updating change control trackers.

Co-winner

Nokia, Finland

- Co-winner in the "Nokia 5G: Connect with Emotion" challenge.

Skills

Proficient in:

- Postgres SQL, MongoDB
- HTML5, CSS, SASS
- Bootstrap, Vite
- Figma, Webflow
- JavaScript, React.js, jQuery
- Node.js, Express
- Git
- Python
- Internet Computer, Motoko
- C/C++
- OOP in Java and C++
- Microsoft Azure, AWS
- Network automation
- Terraform, Ansible
- Docker, Kubernetes
- Internet of Things/Hardware programming
- Planning and Organization.
- Problem Resolution through Strong Technical Knowledge and Firsthand Work Experience.
- At Ease with Numerical Tasks.
- Employee Training and Development.
- GPON/HFC/Metro network design.

- Logging QC KPIs and tracking against customer KPIs, identifying root causes and improvement steps.
- Liaising with wayleave and consent teams to secure build permissions for FTTH infrastructure construction.
- Preparing data, creating consent and wayleave maps, tracking progress, and offer alternative solutions to blockers.
- Implemented change tracking in online ArcGIS for civil, wayleave, and consent changes, achieving a 95% accuracy rate in updated network design packs.
- Proactively identifying and mitigating project risks.
- Organized and managed survey team schedules and ensured timely availability of survey data for design updates.
- Performing infrastructure readiness and opportunity analysis for FTTH builds.
- Producing 2D and 3D model files through Revit for multi dwelling unit fibre routes and equipment installation locations.
- Performing clash detection for ducting within existing structures for multi dwelling unit design pack.
- Producing FTTH high-level, mid-level, preliminary, and low-level design packs by utilizing field-surveyed data using AutoCAD Map3D, QGIS, ArcGIS as per technical specifications.
- Produced technical designs for civil using AutoCAD Civil 3D for construction and permit application to local authorities.
- Creating cost optimized BOM/BOQs for FTTH networks and civil work packs through efficient design.
- Responsible for preparing ODP patching diagrams and POP splicing schedules.
- Supporting external build contractors (PSCS) in permit applications.
- Driving bi-weekly progress meeting with the client and contractors (PSCS) as PSDP.
- Developing and reviewing technical network implementation plans.
- Continuously tracking civil changes and updating network design packs due to civils, wayleave, consent changes.
- Checking that the received as-built drawings are aligned with the original plans and issued amendments.
- Achieved a 30% decrease in common design errors by proposing two rounds of design packs QC increasing customer satisfaction score by 15%.
- Handled the preparation and dissemination of Risk Assessment Method Statements (RAMS) to external build contractors (PSCS).
- Managed the allocation of Job Site Safety Plans (JSSP) to internal field survey and agent teams, enabling analysis of risks and safety planning.

Network Designer

Wananchi Group (Kenya) Limited, Nairobi

2018-Dec - 2021-Feb

Wananchi Group (K) Limited, an East African telecommunications company offering cable television and internet services to residential and corporate customers in Kenya and Tanzania. Working as a Network Design Engineer, I designed and implemented fibre networks from OLTs to subscriber ONUs and headend to client's cable modems. Ensured the delivery of high-quality FTTH and HFC networks prior to handover to commercial teams.

- Designing new and maintenance cases for aerial and underground GPON/FTTH, hybrid fiber-coaxial, and metro active networks and prepared BOM/BOQ for OSP and ISP scopes.
- Responsible for providing network support and troubleshooting assistance to maintenance field teams, subscriber installation teams, and customer service teams.

- Tasked with gathering network As-built data from the field and storing it in a central server.
- Conducted surveys, digitizing new network rollouts with software tools such as AutoCAD, Global Mapper, and QGIS.
- Conducted surveys and designs of power supply units, OLT co-location.
- Generated splicing designs for FTTH, backhaul fibre networks, access fibre networks, and distribution fibre networks end to end.
- Performed optical-level quality inspections for both hybrid fiber-coaxial and GPON/FTTH construction.
- I installed OLT PON cards, managing patching at the OLT to activate splitters and troubleshoot signal issues in the optical network.
- I surveyed and designed hybrid fiber-coaxial distribution node splitting and relocation for Cisco and Teleste distribution nodes.
- Monitoring metro networks using SolarWinds and Cacti for hybrid fiber-coaxial power supply units for optimal network operation.

## **Assistant Project Manager**

*Quava-tel Limited, Nairobi*

**2017-Dec - 2018-Nov**

I started as a network planning and design trainee, where I rapidly absorbed knowledge and gained hands-on experience. I progressed to the role of network planning and design engineer in a remarkably short span. As a network planning and design engineer, my responsibilities were nothing short of comprehensive. I joined the ranks of assistant project manager. My growth within the organization showcases not only my quick learning capabilities but also my dedication to taking on additional responsibilities and learning new skills.

- Stakeholder management while building trust for future business opportunities.
- Completed turnkey projects and solved problems while meeting tight deadlines and budgets.
- Proposing tactical risk and contingency plans in anticipation of potential impediments, constraints, and blockers.
- Developed project work breakdown structures from project scope documents and prepared project budgets.
- Strategy planning, logistics and departmental coordination.
- Responsible for daily progress reports and financial summaries.
- Establishing safely workable designs, ensuring compliance, and serving as the primary point of contact for stakeholder management within the organization.
- Resource facilitation and standard adherence.
- Responsible for project commissioning, project sign-off, and billing.

## **Network Planning and Design Engineer**

*Quava-tel Limited, Nairobi*

As a network planning and design engineer, I developed aerial and underground fiber route maps, conducted site surveys, and created duct routes and cable designs. I also managed fibre splicing schedules, prepared As-built designs, monitored project progress and challenges, and maintained real-time documentation using software systems. Additionally, I played a key role in designing fiber diagrams for FTTH, FTTB, and FTTS networks in AutoCAD, ensuring network integrity and reporting project status to the CTO.

## **Network Planning and Design Trainee**

*Quava-tel Limited, Nairobi*

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## Education

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2022-Jan - Current	<b>Master of Science: MSc in Electronic and Computer Technology – Internet of Things (IoT)</b> Dublin City University Dublin, Ireland
2020-June -	<b>5G</b> <b>Aalto University Summer School</b> Espoo, Finland
2011-May - 2016-June	<b>Bachelor of Science: Bachelor of Science: Mechatronic Engineering</b> Jomo Kenyatta University of Agriculture and Technology Nairobi, Kenya
2006-Jan - 2009-Nov	<b>High School Diploma</b> Sheikh Khalifa Bin Zayed Al-Nahyan Secondary School Mombasa, Kenya

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## Certifications

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2023 – Nov - 2023 – Dec	Front-End Web Development SkillUp IBM
2021 – May	Microsoft Azure Administrator
2020 – July	Microsoft Azure Fundamentals
2018 – April	Cisco Networking Academy: Internet of Things
2018 – April	Cisco Networking Academy: Linux

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## References available upon request

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