# Khumbo Nyirenda

**Central London** 

### **TECHNICAL SKILLS**

React	HTML	AWS	Jenkins	Kotlin
React Native	SCSS, TailwindCSS	Redux	Kubernetes	Sentry
Typescript	GraphQL	Next.js	Jest	Splunk
Python	REST APIs	Gatsby.js	Cypress	Jira/Confluence
Node.js	Express.js	Docker	Playwright	Figma

### **EXPERIENCE**

### Zopa

Frontend Engineer

Nov 2021 - Present

Working in an agile cross-functional team to continuously deliver new products and platform improvements.

- Champion a test-driven, scalable, and maintainable development approach with intraday deployments.
- Frontend lead for 5 major applications with a monthly disbursal of £25 million, rising by 10% monthly
- Mentor junior developers including regular pairing sessions.
- Work closely with backend developers, product, and designers to collaborate in decision making.
- Architected and built several new products and redesigns including a flagship direct to customer, business to business and internal solutions using React, Gatsby, Next, GraphQL and Node.
- Partner with backend developers in Kotlin to maintain an event-driven microservices system.
- Implemented a script to secure dozens of apps against vulnerable base image versions.
- Created an accessibility testing framework for frontend and QA developers.
- Develop a shared components library, accessibility initiatives, and other cross-team standards.
- Experiment using Optimizely to compare designs and features.
- Integrate Splunk, Sentry, and Amplitude loggers.
- Test components and applications using Jest, Cypress, and Playwright.
- Migrated applications from Gatsby.js to Next.js framework.
- Active member of the diversity forum and created Zopa's first Black Network.

### **Tom Teaches Tech**

### Instructor

### Taught HTML, CSS, and JavaScript while mentoring groups of career switchers and new developers.

### Autodesk

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**Technical Consultant** 

### Sep 2019 – Nov 2021

Jul – Nov 2022

- Built React and Redux frontend application and a Python backend to interact with a machine data stream, execute API functions in Fusion 360, and send toolpaths direct to the machine.
- Programmed a SlackBot application to automate the creation and modification of records, using Typescript, Node, Fusion Lifecyle's REST API, Amazon EC2 instances, and Slack's Web API: Bolt.
- Developed a Python and Typescript add-in for connecting directly to an additive machine using Fusion 360's API and Octoprint's REST API.
- Taught a coding course on Python, Typescript, C++, React, Redux, and REST APIs for 16 attendees.
- Troubleshot interface software and debugged application code.
- Organised team development work using Git version control and Jira to manage projects.
- Conducted a review of Manufacturing Execution Systems by assessing API integrations and connectors.
- Created digital assets including webinars, manufacturing tutorials, and YouTube live content.
- Pioneered a data modelling spreadsheet used to design strategies for the unification of Autodesk's products and assessed the impact on returns and subscribers. Presented this impact for four products.

#### **Product Designer Responsible Design Project: e-NABLE** Jan – Jun 2018 Adapted an existing mechanical assistive upper limb to design a 3D printed robotic prosthesis. • Surpassed expectations with a functional prototype costing a total of €135 to manufacture, three times • below the allocated budget and more than ten times less than the closest competitor. CleanEarth Energy Ltd. **Project Management Assistant** Jun 2016 – Jun 2017, Jul – Nov 2018 Worked to design, build, and operate large-scale solar PV and wind turbine renewable energy systems. • Adapted to various roles in the technical, electrical, planning, finance, and commercial departments. • • Managed six solar installers and completing Front End Engineering Design studies. Oct 2017 – June 2019 Staff Student Liaison Council **Co-chair/Academic Representative** University of Bath Biomechanics Dep. **Researcher and Designer** Jul 2017 – Jan 2018 Developed a mixed flow pump additive prototype Cardiovascular LVAD (left ventricular assist device). •

Data Catalyst

Produced actionable insights to manufacturing readiness of over 250 customers in 22 countries.

Jul 2018 - Aug 2019

## EDUCATION

University of Bath		Oct 2014 – Jun 2019
Achieved 2:1 for MEng (Hons) Mechanical I	Engineering	
Erasmus Exchange Industrial Engineering: C	Jan – June 2018	
British International College	IGCSEs and A-Levels	Jan 2011 – Jun 2014

4 A-Level Courses in Mathematics, Physics, Chemistry, Economics

Autodesk/Gen3D

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