

# Thomas Newton

React/Full-Stack Developer | JavaScript, TypeScript, React, Python, Django, HTML, CSS,

📍 Nottingham, UK   🇬🇧 British Citizen   📞 +(44) 7479002310

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## 📁 WORK EXPERIENCE AND SELECT PROJECTS

### SOFTWARE DEVELOPER | ONYX INSIGHT

OCTOBER 2021 - PRESENT, UK

Developed the **AI Hub** platform, the leading tool in wind turbine predictive maintenance used to monitor over 10,000 turbines by market leaders such as **BP Wind**, **GE**, **Pattern Energy**. Delivered features in a fast paced, agile environment such as Data Exploration, SCADA alarming and turbine failure tracking tools. (*React, TypeScript, Jest, Python, Django REST, Postgres, AWS, Gitlab CI/CD*)

### GUITAR LEARNING WEB APP (PERSONAL-PROJECT)

PRESENT, UK

Free online tool for learning the notes on the guitar. Includes more than 100 interactive lessons with a virtual guitar to help you locate and memorise the notes. (*React, HTML, CSS, Firebase, Node.js, Github Actions CI/CD*)

More Projects (Python and JavaScript) : **SizeMySolar**, **Network**, **finance**, **Wiki**, **mail**, **RiverlevelsGB**

### SOLAR ENERGY PROJECTS ENGINEER | NOTTINGHAM CITY COUNCIL

OCTOBER 2019- JUNE 2021, UK

Responsible for identifying, developing and delivering solar PV installations across the Council's portfolio of 27,000 properties. Provided roof and ground mounted solar PV consultancy to over 15 local authorities and other commercial organisations. Produced detailed feasibility reports including technical drawings, expected system performance, grid applications and business cases for multiple sites in excess of 1MW. Managed project budgets, timelines and risks ensuring projects were delivered on schedule such as the **250kWp Broadmarsh car park** installation, which will save the city over 53 tonnes of carbon in the first year of operation.

### DATA ANALYST | LIGHTSOURCE BP

2018, UK

Responsible for analysing and modelling PV performance of more than 300MW of UK operating PV systems, including the impact of temperature on PV performance, system reliability, soiling and comparative PV plant performance. Areas of work included floating solar, degradation, soiling losses and bi-facial solar panels. Developed data mining, analytic skills and strengthened quantitative mindset and attention to detail.

## 🎓 EDUCATION

### MSc SUSTAINABLE ENERGY & ENTREPRENEURSHIP | UNIVERSITY OF NOTTINGHAM (DISTINCTION)

2018-2019, UK

Select courses : Creative Problem Solving, Launching New Ventures, Leading Entrepreneurial Growth.  
Masters Thesis : Large scale battery storage community energy schemes in new housing developments (Trent Basin Case Study). Identified 40% performance drop of on site 200kWp solar array and exceedance of 2.1MWh battery's safe state of charge (SoC).

### BEng RENEWABLE ENERGY ENGINEERING | UNIVERSITY OF EXETER (1ST CLASS HONOURS)

2015-2018, UK

Select courses : Applied Computing for Energy Studies, Renewable Energy Systems, Mathematics for Energy Systems, Data Signals & Systems, Engineering Mechanics, Electronics, and Applied Thermodynamics.  
Bachelors Thesis : Feasibility study into a private wire renewable energy development for a large commercial energy user.

## </> LANGUAGES AND SOFTWARE

**Languages**   English (Native), Spanish (Native).

**Programming**   **Proficient** : JavaScript, TypeScript, Python, Flask, Django, SQL, HTML, CSS.

**Tools & Libraries**   Git, Github, Gitlab, Jira, Confluence, Heroku, AWS S3, Bootstrap, Material UI, Jest.

## 🎓 AWARDS AND CERTIFICATIONS

### MSc Student of the Year

University of Nottingham (2019)

### Winner of the 2019 Passivhaus Student Competition

Tarmac (2019)

**R.U. Hack - Hackathon 2021** (Honorable mention)

### CS50 - Introduction to Computer Science

Harvard University (2020)

### CS50W - Web Programming in Python and JavaScript

Harvard University (2021)

**Interests** : Building things, Habit Stacking, Continuous Learning, Deep Work, Renewable Energy, Guitar, Judo.