

# NUNO ALEXANDRE GONCALVES

London, UK

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[github.com/n-alex-goncalves](https://github.com/n-alex-goncalves)

## SKILLS & CERTIFICATIONS

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**BACK-END DEVELOPMENT:** Python, Java, Spring Microservices

**FRONT END DEVELOPMENT:** ReactJS, TypeScript, JavaScript, Bootstrap

**MISCELLANEOUS:** AWS Cloud Practitioner Essentials, SQL, SQLAlchemy, Excel, SOLID, OOP

## WORK EXPERIENCE

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### INFOSYS

Aug 2022 – Present

*Specialist Programmer (Client: BP)*

*London, UK*

- Built an email mining application using **Azure vector stores, OpenAI, GPT-4, Python, SQL** to extract key information from unstructured email blobs and deliver structured, tabular results via an **ETL pipeline** for **RAG** chat responses.
- Built high-performance backend APIs using **Python, SQLAlchemy, PostgreSQL, GraphQL, and AWS**, transforming national fuel costs for frontend integration. Reduced response times to under 2.1 seconds, improving system efficiency.
- Developed an AI pipeline as part of a research group to modernize **XML/XSLT** legacy systems into scalable **Spring Microservices** via the use of GPT, improving maintainability and modularity.
- Awarded the **Rising Star Certificate (March 2024)** and **Rise Insta Award (December 2024)** for exceptional contributions to team mentorship and work achieved.

### BARCLAYS

Jan 2020 – May 2023

*LifeSkills Youth Advisory Councillor (Volunteer)*

*London, UK*

- Featured as a panellist at Barclays LifeSkills Unpacked seminar, helping **over 300 educators** nationwide integrate career readiness and soft skills into their curriculum.
- Delivered workshops to students from underprivileged schools in Taunton Deane, Somerset and Bury, Greater Manchester to motivate and support their exam preparation.

### ECHOBX

Jul 2021 – Sep 2021

*Operations Intern*

*London, UK*

- Analyzed **40%** of Echobox's potential customer base, auditing **200 – 360 clients per week** and onboarding **2000+** new accounts in Q3, driving significant growth in customer insights.
- Reduced meeting no-show rates by automating client communication flows and email reminders via **Java, Apex, and Salesforce**, improving client retention.

### J.P. MORGAN CHASE & CO

Mar 2020 – Apr 2020

*Spring Into Technology Intern*

*London, UK*

- Networked with industry experts and fintech professionals, gaining insights into their career paths within **J.P. Morgan** and the wider fintech industry.

## EDUCATION

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### UNIVERSITY OF BATH

Bath, UK

*BSc (Hons) Computer Science Degree*

Degree Classification: **First Class Honours**

## PERSONAL PROJECTS

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### TURING MACHINE LAMBDA CALCULUS CONVERTER

Dec 2021 – May 2022

- Built a bi-directional translator between Turing Machines and Lambda Calculus, using **JavaScript, Bootstrap, Jest** to interpret and translate both models within polynomial time efficiency.

### TEMPLATE-BASED ICON MATCHING

Feb 2022 – May 2022

- Built an image icon-detection program using **SIFT, OpenCV, Python** to detect icons and symbols (i.e., road signs) within larger images, achieving 98.5% accuracy with a 10.29s runtime.