

Daniel Simols

07340 364913 | ds1920@ic.ac.uk | [linkedin](#) | [github](#)

EDUCATION

Imperial College London

Computing MEng

Expected June 2024

- Currently on track for a 2:1
- Advanced Computer Architecture, Advanced Databases, Cryptography
- Machine Learning, Deep Learning, NLP, Computer Vision
- Software Engineering for Industry, Software Reliability, Distributed Algorithms
- **Thesis on Fuzzing WebGPU (in progress)**

PROJECTS

BYKE

2023/05/01 - 2023/09/15

- <https://bykeltld.co.uk/>
- I built the whole website and backend myself from scratch and made public after just below 2 months
- Gained experience encrypting user data, Stripe API for payments, database backup automation, managing Linux servers, logging, RESTful API user access control, PostgreSQL programmatic query building, AWS S3, GCP, Python scripting, automated email sending, client-side image compression, responsive design, Google Maps API
- Also responsible for database admin, SEO, handling multiple domains / domain redirection
- Built on Next (React), hosted with custom Node server, Express, TypeScript, PostgreSQL, Git, Bootstrap
- This was an internship with minimal expectations on me, but I used my initiative to bring great value to the company
- I built it with minimal costs, being only £10 / month for the linux servers and AWS S3, discounting the domains. The company wanted to keep costs down as much as possible, as they are a startup.

Discord Fox

2023/08/26 - Current

- <https://discordfox.com/>
- Similar setup to BYKE, but uses Tailwind instead of Bootstrap
- It will give the user full-fledged profile customisability, and enable people to find friends that match their interests and personality
- I'm focusing a bit more on improving my website aesthetic design with this project, along with responsive design. I've gained some experience creating pixel art assets such as the fox next to the title.

Personal Website

Ongoing

- <https://danielsimols.net/>
- Built on NextJS, rented Linux server
- Set up Continuous Delivery with a GitHub Runner and Workflow Configuration

Hexagon-based keyboard

Ongoing

- <https://danielsimols.net/scrawler/>
- I'm designing and building a unique keyboard with hexagonal keys. The link shows my first prototype - I need funds to create a better version

SKILLS

Proficient Languages: Next.js, React, TypeScript, JavaScript, PostgreSQL, BASH, Python

Tools: AWS, Git, GitHub, Docker, JIRA, BitBucket, Heroku

EVENTS

DataProc Competition: Won a competition on fast data processing sponsored by Meta

ICHack23, ICHack24: Participated in Imperial College's 2023 and 2024 hackathons