

Lewis Ng

3rd year MEng student at Imperial College London

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EDUCATION

Imperial College, London — *MEng (4 Years) Computing*

OCTOBER 2019 - PRESENT

- Achieved a 2:1 in second year exams

Birkenhead School

SEPTEMBER 2012 - JULY 2019

PROJECTS

A Really Smart Food App – [link](#)

APRIL 2021 - JULY 2021

- App targeted at reducing food waste by suggesting dishes you could cook with the entered ingredients
- Worked on the backend Django server, created best match algorithms and dealt with post requests from the front end
- Used scraping to populate our database with recipes

WACC Compiler

JANUARY 2021 - MARCH 2021

- Created a full compiler for the WACC language in Scala. Parser + lexer made using Parsley
- Made peephole optimizations for the given instructions set and helped with making an IDE, graph coloring and cross compiling for the Intel instruction set

Pintos

SEPTEMBER 2020 - DECEMBER 2020

- Built a simple operating system from a minimal framework
Implemented kernel threads, scheduler, loading and running user programs, and virtual memory

ARM11 Group Project – [link](#)

MAY 2019 - JULY 2019

- Implemented an ARM11 assembler and emulator
- Built an audio spectrum analyser/visualiser using FFTW and SDL which could be also displayed on an LED matrix with a Raspberry Pi, as an extension
- Tested with our own unit tests and Valgrind
- Documented the process in a report and presentation video
- Top 5 Most Interesting Extension out of 47

SKILLS

Programming Languages

Proficient skills: Java and Python

Previously used: C, GDScript, C#, HTML, CSS, JavaScript, Haskell, Prolog, SQL

Technologies and Tools

Experienced with: JUnit, JavaFX, Parsley and Git

Familiar with: Linux, LaTeX, Docker, Heroku, ANTLR

QUALIFICATIONS

A-levels

Electronics, Maths, Further Maths, Chemistry – **4A*s**

GCSE

Maths, Further Maths, Chemistry, Biology, English Lit/Lang, Physics, Art, DT Systems, French – **11 A*s**

LANGUAGES

English

Cantonese, French (Intermediate)