

BAKHTIAR ZADEH

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An Electronic and Information Engineering MENG student graduating in 2024. Looking for internships to gain experience and learn as much as possible.

EXPERIENCE

APRIL 2023 – OCTOBER 2023

SOFTWARE ENGINEER INTERN, J.P. MORGAN

- During my 6-month placement, I have been working as a software engineer as a part of the Rates/Credit E-trading group. My smaller team focuses on the low-latency order execution engine.

JULY 2022 – OCTOBER 2022

HARDWARE ENGINEERING INTERN, IMAGINATION TECHNOLOGIES

- Worked in the Graphics High group. Primarily worked on verification and testbench profiling/grading. During this I also attended SystemVerilog and UVM trainings and hope to learn more via continued application.

OCTOBER 2021 - CURRENT

TEACHING ASSISTANT – VARIOUS MODULES, IMPERIAL COLLEGE LONDON

- I offer 1-1 tutoring and I take part in being a teaching assistant for various modules.

SEPTEMBER 2019 – FEBRUARY 2020

TECH SALES, BOSCH

- Was responsible for managing a team and coordinating demonstrations and other activities to boost sales and engagement.

EDUCATION

JUNE 2021

ELECTRONIC AND INFORMATION ENGINEERING, IMPERIAL COLLEGE LONDON

Achieved a 1st class award for my first and second year.

AUGUST 2020

A-LEVELS, WOODHOUSE COLLEGE LONDON

Mathematics – A*

Further Mathematics – A*

Physics – A*

AUGUST 2018

GCSE, WREN ACADEMY

Mathematics – 9
Further Mathematics – 9
Physics – 9
Biology – 9
Chemistry – 7
Computer Science – 8
English Language – 9
English Literature – 9
Spoken English Language – Distinction
Geography – 7
French – 6

SKILLS

- Highly proficient in mathematical methods and analysis
- Good interpersonal skills developed by experiencing different work environments
- Python as a secondary language
- Linux familiarity through work
- Intermediate C++ knowledge including data structures and algorithms. Various projects completed.
- CPU Design and low-level programming
- SystemVerilog
- Experience with UVM
- Version control, Git and Perforce

PROJECT WORK

I have completed numerous difficult projects during my time at university.

- Created a fully functioning autonomous mars rover that could navigate and survey complex terrain with obstacles. This was my largest project and involved many subsystems, more details can be seen on my LinkedIn.
- Made a C++ Compiler from scratch for MIPS32 assembly, the compiler was not perfect, but it could compile C++ code into mips32 assembly, I learnt about Lexx and Yacc for this.
- Developed an online multiplayer Simon Says game to help patients with musculoskeletal diseases like cerebral palsy. This was a large group project that involved learning about game design, FPGA programming, and network programming using AWS to host a python server.
- Boolean Algebra simplifier using algorithms to build a binary tree and reduce all duplicate subtrees without using prebuilt functions.
- Designed and tested a dual core MU0 – Arm CPU capable of receiving input via UART, outputting data in bitstreams, and floating-point arithmetic. It was proven to be able to calculate values of $\sin(x)$ taken as input from the user.
- Designed and synthesized a working MIPS 32 CPU in SystemVerilog, this was my first hardware project that was ready for printing.
- Charity expeditions in middle east combatting drought