Yann Herklotz

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Education

Oct 2015-Jul 2019 | MEng Electronic and Information Engineering,
Imperial College, London
Notable Courses: Type Systems for Programming Languages, High Level Programming, Language Processors, Complexity, Graphics, Machine Learning, DSP, Digital Electronics, Mathematics for Signals and Systems, Coding Theory
Current Average: 75.45%

Sep 2013-Jul 2015 | International Baccalaureate,
International Bilingual School of Provence, Luynes, France
Courses: German SL (5/7), English HL (7/7), Geography SL (7/7), Physics HL (7/7), Mathematics HL (7/7), Chemistry SL (6/7).
Overall: 41/45

Work Experience

Jan 2019-Current | Teaching Assistant for Language Processors at Imperial, London
Teaching assistant for the Language Processors course which teaches the fundamentals of Compilers.

Sep 2018-Dec 2018 | WebApp Design for Inspiring Girls International, London
Development of a video sharing platform for female role models to inspire young girls.

Oct 2018-Current | Teaching Assistant for Computer Architecture at Imperial, London
Teaching assistant for the Computer Architecture course for 1^{st} and 2^{nd} year students at Imperial College.

Apr-Sep 2018 | GPU Software & Hardware Placement at Arm, Cambridge
Spent 3 months working in the Hardware Verification department and then moved to the Driver Development team.

Oct 2017-Mar 2018 | Teaching Assistant for Introduction to Programming at Imperial, London
Teaching Assistant for Introduction to Programming in C++.

Jun-Sep 2017 | GPU Hardware Verification Intern at Arm, Cambridge
Interned in the Verification Methodology team in the GPU department at Arm where I worked on a linting framework for the various test benches.

Oct 2016-Jun 2017 | Programming Tutor at TuringLab, London
During the weekend I worked as a tutor, teaching children from 11 to 16 how to program in JavaScript.

Awards and Scholarships

Jul 2017 | Engineering Dean's List, Year 2
Sep 2016 | UKESF Scholarship
Jul 2015 | Engineering Student of the Year

Languages

English | Fluent
German | Mothertongue
French | Fluent

University and Personal Projects

Personal and university projects that I am currently working on. More projects can be found on github.com/ymherklotz.

Oct 2018-Current | **VeriFuzz: Final Year Project, Fuzz-testing Verilog Simulators**

Currently working on my final year project for my MEng degree, which is writing a Fuzz-testing tool to test the output of Verilog simulators and make them more reliable.

Apr 2017-Jun 2018 | **YAGE: Yet Another Game Engine** github.com/ymherklotz/YAGE

2D game engine designed to render many sprites every frame and supports an entity component system to make the creation of large game objects easier and promote separation of concern.

Feb-Mar 2018 | **FMark: F# Markdown compiler** github.com/ymherklotz/FMark

Project for our High Level Programming module. Wrote a markdown compiler in F# using purely functional code to encourage code reuse and higher level functions that abstract away all similar code.

Jan-Mar 2017 | **Compiler: C89 to MIPS compiler** github.com/ymherklotz/Compiler

Project for our Language Processor module. The aim was to build a complete compiler in C++ using Flex and Bison which could generate MIPS code that could then run on our MIPS simulator.

Oct-Nov 2016 | **MIPS CPU Simulator** github.com/ymherklotz/MipsCPU

Project for our Computer Architecture course. This was about developing a MIPS CPU that would simulate the MIPS I instructions cycle accurately.

Technical Skills

Advanced	C, C++, Haskell, F#, Python, Clojure, git, Linux, Arch Linux, Emacs
Intermediate	Verilog, Xcelium Simulator, Altera

Interests and Activities

Technology, Open-Source, Functional Programming, Game Engine Design, Compilers, Tennis, Basketball, Travelling