

Oisín Davey

Student of theoretical physics and international competitive programmer

Skills

Highly proficient in C++

Competed in hundreds of online contests in C++; represented Ireland internationally in the IOI using the language.

Programming language acquisition

Comfortable and practised adapting to languages to suit the needs of a project; incorporated C, C++, Python, Go, Typescript, C#, and CSS in major projects; used Java, HTML and Haskell recreationally.

Comfortable with CAD

Applied experience with solidworks & openscad, having used both in project work.

Machining experience

Much experience operating 3D printers and handheld tools. Some experience operating CNC lathes, laser cutters, hot wire strips and CNC mills.

Other info

Academic grade average

91.44% in first year, 92.67% in term 1 of this year.

College positions

Chairperson and co-founder of PhysChem society, first year rep for computer science society, committee member of maths society, first year rep in experimental physics department.

Microsoft office specialist master certificate.

625 points in leaving cert.

Awards

International Olympiad in Informatics

Represented Ireland in 2019, 2020 and 2021, winning a bronze medal in 2021 in Singapore, thereby earning scholarships to the university of Waterloo and the national university of Singapore.

All-Ireland Collegiate Programming contest

Placed 1st in 2023.

All-Ireland Programming Olympiad

Placed 2nd, 1st and 4th place in 2021, 2020 and 2019, respectively.

UK-IE Collegiate Programming competition

Placed 2nd & 4th place in 2018 & 2019.

Boole Award (Maynooth)

Highest mark in first year mathematics.

Stokes Award (Maynooth)

Highest mark in first year mathematical physics.

Molloy Award (Maynooth)

Highest mark in first year experimental physics.

Experience

Tyndall, Cork — *Optoelectronics research fellow*

June 2023 - September 2023

This position has been accepted but has yet to commence. Simulation in C++ of photonics involving the quantum-confined stark effect using the LAPACK linear algebra library.

FarmEye, Athlone — *Software engineer*

June 2022 - September 2022

Research & Development. Making GNSS kits using raspberry pis running RTKLIB. Prototype creation for digital soil penetrometer. Meteorological data acquisition & visualisation with ECMWF python API & QGIS.

Educandi, Sligo — *Maths tutor & Department head*

June 2021 - September 2021

Tutored 4 hours per week; managed a team of 6 for a content project, totalling 500 pages of notes and questions; handled the assignment of tutoring hours; worked IT for the company. Thereafter I quit to work independently, where all my students achieved H1s and H2s in their leaving cert maths exam.

SL Controls, Sligo — *Software analysis pre-internship*

August 2018 - December 2018

Analysed and summarised competitor's open-source C# architecture for photogrammetry drone; wrote C script for NMEA parsing.

Education

Maynooth University, Kildare — *BSc in Theoretical physics & Pure maths*

August 2021 - Present

Undergraduate degree in pure maths & theoretical physics, having also taken classes in chemistry & experimental physics.

Personal website

Used HUGO and JavaScript to create a personal blog site and online CV.

Available here: blog.oisín.ie

Also used python, angular and typescript to create an alternative to the archive provided by the state exams commission to enable my students to access the scripts easily.

Available here: papers.oisín.ie

Contact

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