Noah Trane

St John's College, Oxford, United Kingdom | noah.trane.work@gmail.com | +353 87 912 0617

noahtrane.com | linkedin.com/in/noahtrane | github.com/noahtrane

About Me

Second-year engineering student at the University of Oxford with strong mathematical skills and growing experience in programming. Keen interest in machine learning, data analysis, programming and mathematics. Currently building technical skills in Python and in AI, and working on small coding projects to strengthen practical skills. Seeking a summer internship to apply analytical thinking, programming skills, and mathematical knowledge in a technical setting.

Education

St Gerard's Secondary School, Leaving Certificate — Sep 2019 - Jun 2024

- Leaving Certificate score: 625/625, including an A* in Mathematics, Applied Mathematics, Physics, Chemistry, Biology, French and English

University of Oxford, Masters of Engineering — Sep 2024 - Present

- Predicted Grade: First Class Honours (based on performance in Prelims; final classification determined in later years)
- Relevent Coursework: Calculus I–III, Linear Algebra, Complex Algebra, Ordinary Differential Equations I & II
- Awarded a first in Mathematics and coding assessments, with a score of 48/50

Experience (FOLLOWING IS TEMPLATE TO BE FINISHED)

Software Engineer, Apple – Cupertino, CA — June 2005 – Aug 2007

- Reduced time to render user buddy lists by 75% by implementing a prediction algorithm
- Integrated iChat with Spotlight Search by creating a tool to extract metadata from saved chat transcripts and provide metadata to a system-wide search database
- Redesigned chat file format and implemented backward compatibility for search

Software Engineer Intern, Microsoft – Redmond, WA — June 2003 – Aug 2003

- Designed a UI for the VS open file switcher (Ctrl-Tab) and extended it to tool windows
- Created a service to provide gradient across VS and VS add-ins, optimizing its performance via caching
- Built an app to compute the similarity of all methods in a codebase, reducing the time from $\mathcal{O}(n^2)$ to $\mathcal{O}(n \log n)$
- Created a test case generation tool that creates random XML docs from XML Schema
- Automated the extraction and processing of large datasets from legacy systems using SQL and Perl scripts

Publications

3D Finite Element Analysis of No-Insulation Coils — Jan 2004

Frodo Baggins, ***John Doe***, Samwise Gamgee

10.1109/TASC.2023.3340648

Projects

Multi-User Drawing Tool — github.com/name/repo

- Developed an electronic classroom where multiple users can simultaneously view and draw on a "chalkboard" with each person's edits synchronized
- Tools Used: C++, MFC

Synchronized Desktop Calendar — github.com/name/repo

- Developed a desktop calendar with globally shared and synchronized calendars, allowing users to schedule meetings with other users

- Tools Used: C#, .NET, SQL, XML

Custom Operating System 2002

- Built a UNIX-style OS with a scheduler, file system, text editor, and calculator
- Tools Used: C

Technologies

Languages: C++, C, Java, Objective-C, C#, SQL, JavaScript

Technologies: .NET, Microsoft SQL Server, XCode, Interface Builder