

Patrick Ferris

Cambridge, United Kingdom
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Interests

Application of computer science to solve complex environmental and social problems, systems programming including networking and privacy, open-source software, education and data visualisation.

Employment

University of Cambridge, Computer Laboratory

Research Assistant in the Energy and Environment Group

July. 2022 - Present

Project: Working in the David Attenborough Building with the Cambridge Centre for Carbon Credits (4C) to help build a trusted decentralized marketplace where purchasers of carbon credits can confidently and directly fund trusted deforestation avoidance projects.

OCaml Labs & Tarides

Software Engineer

July. 2020 - June. 2022

Project: Worked on the continuous integration infrastructure, documentation, websites and Multicore OCaml with *algebraic effects*. Also, part of a team who reignited OCaml's participation in Outreachy for promoting diversity and inclusion in open-source.

Amazon

Software Engineer Internship

June 2019 - Aug. 2019

Project: Worked on the Amazon Prime team.

Health Data Insight

Research Internship

June 2018 - Aug. 2018

Project: "*The Index of Suspicion*" used computational methods and data-science to identify patterns in prescriptions prior to cancer diagnosis as a potential early indicator of the disease.

Education

B.A. Computer Science

Pembroke College, University of Cambridge (High II.i)

Oct. 2017 - June 2020

Project: "Optimisations across Software and Hardware with RISC-V" which looked at how RISC-V can open doors to greater control and manipulation over the hardware-software interface.

International Baccalaureate

International School of Toulouse (45/45)

Sep. 2015 - June 2017

Publications

Josephine French, Cong Chen, Katherine Henson, Brian Shand, Patrick Ferris, Josh Pencheon, Sally Vernon, Meena Rafiq, David Howe, Georgios Lyraztopoulos, Jem Rashbass. 2019. **Identification of Patient Prescribing Predicting Cancer Diagnosis Using Boosted Decision Trees**. In *Conference on Artificial Intelligence in Medicine in Europe*.

Talks

Sadiq Jaffer and Patrick Ferris, **Continuous Monitoring of OCaml Applications using Runtime Events**. 2022. *OCaml Workshop, International Conference of Functional Programming*.

Tim McGilchrist, David Allsopp, Antonin Décimo, Thomas Leonard, Anil Madhavapeddy, Kate Deplaix and Patrick Ferris, **Homogeneous builds with OBuilder and OCaml**. 2022. *OCaml Workshop, International Conference of Functional Programming*.