# river Lane

# Quantum computing internship schemes at Riverlane

Riverlane builds groundbreaking software to unleash the power of quantum computers. Backed by leading venture-capital funds and the University of Cambridge, we develop software that transforms quantum computers from experimental technology into commercial products.



# About our internships

- Full time, based in Cambridge (Covid permitting summer 2020's interns successfully mixed remote and office working)
- Work alongside a team of expert software developers, computer scientists, mathematicians, quantum information theorists, computational chemists and physicists
- Work with a dedicated supervisor
- Produce a concrete output
- Competitive stipend

# What you will do

- Develop an understanding of quantum algorithms and industrial applications of quantum computers
- Research, devise, develop and/or implement algorithms and software to enhance Riverlane's capabilities
- Contribute to one or more projects that are core to Riverlane's technical goals
- Discuss ideas with colleagues and communicate research in the form of presentations and reports

# Riverlane offer two internship schemes, one aimed at undergraduate and master's students, and another aimed at PhD students.

# Undergraduate and master's students

Duration: 10-12 weeks during summer 2021

Competition opens: 18 Jan 2021

Application deadline: 19 Feb 2021

Interviews: w/c 8 March 2021

## Requirements:

- A current undergraduate (at least third year) or master's student in a highly numerate subject, such as a science, mathematics, or engineering
- Experience with at least one programming language
- Excellent critical thinking and problem-solving ability
- Strong communication skills, both written and verbal
- Ability to take initiative and to work well as part of a team

# **PhD students**

- Duration: 3-6 months
- We run 2 3 competitions a year; keep an eye on our website for details

### **Requirements:**

- Currently pursuing a PhD degree in a highly numerate subject, such as a science, mathematics, or related technical field
- Evidence of creative, high-quality academic work
- Experience with at least one general purpose programming language
- Excellent critical thinking and problem-solving ability
- A track record of communicating scientific results to colleagues and other audiences
- Ability to take initiative and to work well as part of a team
- Passion for translating academic expertise into an applied industrial setting

