

SPARC Summer School 2015

- SPARC is a two-week summer programme for **exceptionally gifted secondary school mathematicians**.
- It exposes participants to exciting **technical material** they would not otherwise see until graduate school, teaches them valuable **interpersonal skills**, and helps them think about how they might use their talents to make the world a better place.
- The programme will be held at **UC Berkeley, California, USA** from **August 4-16, 2015**. There will be about 30 students and about 10 instructors.
- Secondary school students from **any country** are eligible to apply. **Attendance is free for all admitted students**, and travel scholarships are available.

What will I learn?

Examples of topics covered on the programme include:

- **Technical material:** machine learning and artificial intelligence, neuroscience, probability and statistics, information theory, causal modelling and big data, economics, computational cognitive science.
- **Interpersonal skills:** effective communication, building relationships, working in teams, negotiation.
- **Life skills:** cognitive biases, effective decision making, making the best possible impact on the world.

Who are the instructors?

SPARC is organised by several past US team members at the International Mathematical and Informatics Olympiads. Core classes are delivered by professors and PhD students from Stanford, Berkeley, and MIT. Guest lecturers in previous years have included:

- **Percy Liang**, Professor of Computer Science, Stanford
- **Adam D'Angelo**, CTO of Facebook, founder of Quora
- **Pieter Abbeel**, Professor of Robotics, UC Berkeley
- **Gabriel Carroll**, Professor of Economics, Stanford
- **Greg Brockman**, CTO of Stripe
- **Tom Griffiths**, Professor of Cognitive Science, UC Berkeley
- **Lester Mackey**, Professor of Statistics, Stanford

What's it like?

Even when the content is challenging, the atmosphere is relaxed and centred on experiences. Classes are small and discussion-based, activities range from programming labs to prediction markets, and invited speakers include academics, CEOs, and philanthropists.

Perhaps most importantly, SPARC students are surrounded by a community of thoughtful students, junior counsellors, guests, and instructors. For many participants, discussing and sharing ideas outside of class is the most important part of SPARC.

In the three previous SPARC summer programmes, the median anonymous response to "0 to 10, are you glad you came?" was 10. Student testimonials are available at sparc-camp.org/testimonials/.

How do I apply?

If you are interested in applying, please submit your first round application at sparc-camp.org by **April 3**.

The application form takes only a few minutes to fill out. The application process is selective, but the program is completely free for admitted students, and scholarships to cover travel are available. We will be reviewing applications on a rolling basis - you are encouraged to apply as soon as possible.

How do I find out more?

More information, including the application, is available at sparc-camp.org. You can watch a **video** about SPARC at bit.ly/sparc2015video. If you have any questions, we would be delighted to hear from you. You can email us at contact@sparc-camp.org.

We look forward to receiving your application!