



**UNSW Competitive Programming
and Mathematics Society**

2022 DIRECTOR ROLE DESCRIPTIONS



**COMPETITIVE
PROGRAMMING
AND MATHEMATICS**

PORTFOLIOS



Programming

2 programming directors



Mathematics

2 mathematics directors



Marketing

2 marketing directors



Events

2 events directors



ABOUT US

If you enjoy problem solving, then CPMSoc is for you.

We host regular workshops, competitions and social events for students interested in competitive programming and/or competitive maths.

Our events give students a chance to learn about, participate in and meet other people who are interested in competitive programming and maths. More importantly, our in-person events have free food!

PROGRAMMING

Competitive Programming

By **competitive programming**, we are referring to the type of programming problems encountered in competitions such as the International Collegiate Programming Contest (ICPC) and the International Olympiad in Informatics (IOI), and in online platforms such as Codeforces. There is no expectation that you have competed in these particular competitions.



The Role

The programming directors will be in charge of the following:

- Preparing and presenting fortnightly **workshops** for competitive programming (mathematics workshops run in the other weeks). The format is flexible: workshops can be run similarly to lectures, but a more casual and participant-led approach is often more engaging. A set of problems participants can work on should accompany a workshop.
 - Writing and preparing problems for **competitions**, and possibly helping with organising them. This will likely be done in collaboration with other societies such as the UNSW Computer Science and Engineering Society (CSESoc).
 - Recruiting and leading a **subcommittee** to assist with their duties.
 - Running **other initiatives** if desired, for example, publishing blogs on the website.
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Desired Qualities

The following qualities are desirable (but not necessarily required) in candidates:

- Experience with competitive programming.
- Strong algorithmic problem solving skills.
- Knowledge of algorithms, data structures and their implementation in C++.
- Experience with preparing and presenting educational material.
- Leadership and communication skills.

MATHEMATICS



Competitive Mathematics

By **competitive mathematics**, we are referring to the type of mathematics encountered in mathematical problem solving competitions such as the International Mathematical Olympiad (IMO), the International Mathematics Competition for University Students (IMC), and the Simon Marais Mathematics Competition (SMMC). There is no expectation that you have competed in these particular competitions.

The Role

The mathematics directors will be in charge of the following:

- Preparing and presenting fortnightly **workshops** for competitive mathematics (programming workshops run in the other weeks). The format is flexible: workshops can be run similarly to lectures, but a more casual and participant-led approach is often more engaging. A set of problems participants can work on should accompany a workshop.
- Writing and preparing problems for **competitions**, and possibly helping with organising them. This will likely be done in collaboration with other societies such as the UNSW Mathematics Society (MathSoc).
- Recruiting and leading a **subcommittee** to assist with their duties.
- Running **other initiatives** if desired, for example, publishing blogs on the website.

Desired Qualities

The following qualities are desirable (but not necessarily required) in candidates:

- Experience with competitive mathematics.
- Strong mathematical problem solving skills.
- Knowledge of common topics and techniques in competitive mathematics.
- Experience with preparing and presenting educational material.
- Leadership and communication skills.



MARKETING

The Role

The marketing directors will be in charge of the following:

- Producing graphics (e.g., cover photos for events) and writing promotional posts.
- Managing our social media accounts.
- Raising awareness of our society to as much of the student body as possible, through social media, our events, and other initiatives if desired.
- Recruiting and leading a subcommittee to assist with their duties.



Desired Qualities

The following qualities are desirable (but not necessarily required) in candidates:

- Experience with graphics software such as Photoshop or Canva.
- Past involvement in marketing/creative subcommittees or similar roles.
- An interest in competitive programming/mathematics.
- Leadership and communication skills.



EVENTS

The Role

The events director(s) will be in charge of the following:

- Proposing, planning, organising and running social and community events (rather than educational ones), often in collaboration with sponsors.
- Organising internal events to promote a strong and cohesive team culture.
- Recruiting and leading a subcommittee to assist with their duties.
- Running other initiatives, if desired, to build and foster our community and create a welcoming social environment for members.

Desired Qualities

The following qualities are desirable (but not necessarily required) in candidates:

- Sociable, ambitious and outgoing.
- Past involvement in events/social subcommittees or similar roles.
- An interest in competitive programming and/or mathematics.
- Leadership and communication skills.

APPLY NOW

<https://forms.gle/kKR1uV8xdum49MC56>

Closes 14th February

**UNSW Competitive Programming
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discord.gg/MDNa8Jk

