Aleksandr Maksimov

u8232769

u8232769@anu.edu.au

2nd year of B of Adv Comp (AACOM)

DOB: 5 June 2007

GitHub: @maleksware

ANU information

- Undergoing the Bachelor of Advanced Computing (AACOM) program (commenced S1 2025, expected graduation 2028)
- Has been awarded the Chancellor International Scholarship
- Received a GPA of 7.0 in 2025 with the average score of 96% across 8 courses (48 units)
- A member of ANU Computer Science Students' Association

Past teaching and tutoring

- Casual staff member in Canberra Grammar School's Code Cadets, teaching programming and electronics to students from Y7 to Y12
- Tutoring a primary school student privately with focus on mathematics competitions
- Was leading school initiatives in physics, mathematics and computer science in 2020-2022, continuing some of those at school in the ACT in 2023-2024

Notable personal projects

Dynamic substring comparison problem: segment tree approach, 2024 (pdf, full repository) – a small research paper presenting a segment tree based algorithm for quickly comparing substrings of a changing string using polynomial hashing with updates. Features implementations in C++.

meshO Leaderboard (currently *Orienboard*) – a complete system for broadcasting results of orienteering events to multiple independent screens with central control from the admin desk. Implemented for the Australian Mountain Bike Orienteering Carnival 2024 as part of the meshO startup. The system has been in use by meshO until its replacement by a newer iteration on a different stack. The source code is currently not publicly available. Stack used: Flask, SocketIO, vanilla JavaScript.

Current and future interests

- Mathematics in computing
- Algorithms and complexity theory
- Type theory and category theory with applications
- Cybersecurity

Problem solving & miscellaneous

- Full credit in the Haskell online course by the University of Helsinki
- IMC contest prize recipient (2024), ICPC Preliminary Round participant in ANU #2 team (2025)
- PeCan+ CTF participant (2023, 2024), challenge author (2025)
- bSides Canberra participant (2024)
- Australian IOI team candidate (final selection round) (2024)
- Has experience setting up and using automated problem creation and testing tools, such as Codeforces Polygon and ejudge
- Fluent in Russian (native) and English