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To
Adaptive Optics Group Lead,
Research School of Astronomy and Astrophysics,
ANU College of Science

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I'm writing this statement to apply for the job number 528037, titled "*Adaptive Optics Real-Time Software Engineer*", advertized on the ANU jobs website. I found this position aligned to my interests, experiences and capabilities.

Here I address how I meet the selection criteria:

1. I hold a M.S. in software engineering from the University of Tehran, the most well-known university in Iran. I'm also in the final year of my Ph.D. in computer science at ANU. My research in both degrees has been focused on real-time systems.
2. Both my M.S. and Ph.D. theses include design, implementation and testing of real-world software systems (e.g. RTOS and language VM).
3. I have done large-scale software development using C/C++ or Rust as the core language. I have also been using Python as a scripting language and a test target for my Ph.D. thesis. As HPC experience, I have done a few postgraduate courses and research, on a wide range of topics including designing multi/many-core processors and co-processors, programming parallel architectures such as GPUs and Intel SIMD intructions, and multi-threaded paradigms like pthreads and openmp.
4. I have done software development at operating-system and language runtime level, which requires permanent attention to multi-threading in various system aspects including design, implementation and performance evalation.
5. My experience in developing realtime software includes addressing many technical (e.g. memory and device driver) and management (e.g. dividing responsibilities and documentation) challenges.
6. In our research group at ANU, I am working as a team member responsible for design and implementation of a realtime variant of a software system. Software engineering practices such as agile Scrum are used in our group. It also includes solving many engineering problems.
7. High-quality documentation has always been critical to my work, as it facilitates understanding other team members' works and clarifying my work to them.
8. I appreciate the principles and policies towards equal opportunity, and I believe it is beneficial for indivuals, employers and the society.

I look forward to hearing from you.

Regards,

Javad Ebrahimian Amiri