

Candidate with Matthieu Cornelis and John O'Hare, Ph.D.

7:00 pm, January 3, 2024

Experience

- Ran a multimodal immersive lab at the University of South Africa for 15 years, designing and running a large-scale system for telepresence and collaboration
- Worked in consultancy and support roles at the university globally and nationally for 25 years, advising on robotics, AI and virtual production techniques
- Spent a year doing independent R&D focused on robotics, AI and virtual production after leaving his previous role
- Has been consulting independently for the past year, providing AI and generative expertise to various companies on projects like autonomous ships and compression algorithms
- Background includes a partial master's degree in machine learning where he gained experience with algorithm engineering and open source tools
- Left his most recent role advising an autonomous shipping company after filing a patent for a data transmission technique

Education

- Completed a PhD focused on telepresence systems and immersive virtual reality environments
- Enrolled in a masters program in machine learning but felt the curriculum was too theoretical and not hands-on enough
- Dropped out of the masters to pursue consulting work and independent learning opportunities in AI and machine learning
- Has been doing consulting work for various companies on projects involving marine autonomous vessels, compression algorithms and other technical areas
- Cites the abundance of open source tools and resources as enabling him to quickly gain skills and experience through independent study and applied work

Skills

- Extensive experience building chatbots and assisting with large language models like GPT-3 and Mixer for conversational AI applications
- Skilled at developing Python toolchains to integrate AI systems like image and video generators into apps
- Focused on edge computing and attention systems using computer vision to analyze human attention patterns while prioritizing user privacy and data security
- Passionate about using decentralized, cryptographic techniques to ensure global equitable access to AI without discrimination

Recent Projects

- Focused most recently on building an autonomous shipping startup using marine AI before having to stop the project due to military concerns over technologies being too similar to their own
- Obtained a patent for a compression algorithm developed for transmitting data from autonomous ships
- Enjoyed working on diverse problems and finding the Valsoft Aspire role appealing as it would allow him to consult across different companies and industries
- Threw himself fully into various AI projects but is looking for something more stable currently given economic uncertainties

- Completed half a masters in machine learning before leaving to pursue own learning and hands-on projects instead of theoretical coursework

Candidate questions

- He and his wife are open to relocating internationally for her senior role at Spotify, mentioning possibilities in Canada, Europe or Germany
- His role would focus on designing decentralized solutions using cryptography, rather than hands-on coding
- Has experience developing minimum viable products (MVPs) and working with alpha customers, but no products have fully launched yet
- Interested in learning more about the different company locations to find the best fit for an opportunity and their relocation plans
- Has deep knowledge of cryptography from years of work on distributed systems and equity of access to AI platforms

Follow-up

- Profiles of candidates will be sent to the R&D team where the hiring manager is located for review
- The R&D team will shortlist candidates that are a better fit for various portfolios
- He will receive an update on potential next steps by the end of the following week after the R&D team has reviewed profiles