

## Recruitment Team

November 21, 2023

UNIVERSITY OF KENT  
CANTERBURY  
KENT, CT2 7NZ

### Application for Postdoc: Machine learning for OCT-Raman medical imaging

Dear Prof. Philippe De Wilde and the Recruitment Team,

## About Me

I am excited to apply for the Postdoc position: Machine learning for OCT-Raman medical imaging at the School of Biosciences, University of Kent. My extensive research experience in machine learning, deep learning, and image processing, culminating in a PhD in Computing, positions me as an ideal candidate for this challenging and rewarding role.

## Why The University of Kent?

I am particularly interested in contributing to the Quantitative OCT-Raman spectral imaging project. The prospect of developing machine learning algorithms to operate during breast conserving surgery presents a challenging yet impactful endeavor that resonates with my research aims. Having developed and published on deep learning models in medical imaging, I bring a wealth of relevant knowledge and a strong publication record to your team.

## My Background and Skills

During my tenure as a Visiting Lecturer at Birmingham City University, I have designed courses and conducted research in AI and data visualization, equipping students with in-depth machine learning toolsets. My role as a Deep Learning Research Intern at Nottingham University involved the creation of a deep learning model for diagnosing chest radiographs, which aligns with the algorithmic and clinical facets of your project. My proficiency with TensorFlow/Keras/PyTorch and a strong publication record including journal articles and conference presentations ensure that I can contribute effectively to your team from day one.

## Conclusion

I am particularly drawn to this opportunity to work under the supervision of Prof. Philippe De Wilde. His vast experience in signal processing and neural networks will undoubtedly complement my passion for advancing state-of-the-art deep learning algorithms and solving complex problems in artificial intelligence.

Please find my curriculum vitae attached for your consideration. I look forward to the opportunity to discuss how my expertise and enthusiasm for machine learning can contribute to the innovative research at the University of Kent.

Sincerely,

**Usama Zidan**

*Attached: Curriculum Vitae*