

## **AI Interactive Workshop - Train and Test your own Neural Network**

**Ben Mills**

*Optoelectronics Research Centre, University of Southampton, Highfield, Southampton, SO17 1BJ*

*Corresponding author: [bm602@orc.soton.ac.uk](mailto:bm602@orc.soton.ac.uk)*

Jumpstart your AI journey from the ground up with this 45-minute, hands-on tutorial in image recognition using convolutional neural networks, applied to a real-world photonics laser problem. We'll start with a 25-minute introduction covering the basics, followed by 20 minutes as an interactive coding session. All code will be provided — just bring a charged laptop and a Google/gmail account (for free access to Google Colab). Simply press 'run' to train and test your own neural network, or try tweaking the code to boost your score! Perfect for all skill levels, and you'll leave with practical AI skills and ready-to-use code.