

**Supplementary Information to be provided by the student:**

- A** Please describe briefly any subject specific research skills that you have developed or improved in the course of your time as a research student. For example, these might include: research methodology; data analysis and management; record keeping; bibliographical skills; presentation of research.

Skills that I have developed and improved in the course of my time as a Probationary Research Student:

- MATLAB Programming skill for data analysis and data cleaning
- Python Programming skill for deep learning and data analysis
- Deep learning framework: Pytorch, Tensorflow and Keras
- Presentation of my own research using diagrams and mathematical equations
- Searching for literatures related to my research topics
- Literature review and summarization
- Academic writing
- Visualizing and Processing three-dimensional medical images using software, such as ITK-SNAP and MITK Workbench
- Using Github to keep track of my research progress (i.e. written codes)
- Manuscript writing using LaTeX

- B** Please describe briefly any personal and professional skills in which you have received training or which you have enhanced during the course of your time as a research student. For example, these might include: time management; language skills; IT skills; team work; problem solving; presentation skills; teaching skills; career planning.

- Time management for different tasks: literature review, research project development and progress reports
- Collaborating and communicating with people in different fields (i.e. computer vision and medical imaging)
- Conveying my ideas clearly through slides presentation
- English listening, speaking and writing skills

**C Please identify any subject-specific or personal and professional skills in which you (and your supervisor(s)) foresee the need for further development or training.**

Subject-specific skills

- More advanced MATLAB and Python Programming skills
- Academic writing using LaTeX
- Linux (i.e. Ubuntu) utilization
- Advanced Github techniques
- More advanced theoretical understanding of deep learning and computer vision
- Anatomical and clinical knowledge of the fetal brain

Personal and professional skills

- Communication skills for seeking research collaborations
- Proposal preparation and writing skills for research grants application
- Skills to develop practical applications from research ideas and findings
- Skills to discover unsolved medical problems, especially those in developing countries, that are related to my research and able to be solved by my expertise
- Conveying my ideas and presenting my work clearly to people not working in my field

**D Please list any other activities which have contributed to the development of your work. For example, these might include courses attended, conference presentations given, publications, opportunities to undertake teaching etc.**

Seminars attended

- Accidental imaging: exploiting corners, craters and other occluders.
- Keep on learning
- Causal Spatiotemporal Representations
- Using Deep Learning to Improve Visual Localization
- Towards verifying neural autonomous systems
- From SLAM to Spatial AI
- Supervised and Unsupervised Techniques for 3D Surface-Based Human Understanding: HoloPose and Lifting AutoEncoders
- Self-supervision, Meta-supervision, Curiosity: Making Computers Study Harder
- CVPR 2020 seminars
- MICCAI 2020 seminars

Workshop attended

- Introduction to TensorFlow 2.0

Courses attended

- (Online) Machine Learning by Andrew Ng

Fetal ultrasound scanning viewing session (John Radcliffe Hospital, under the guidance of Dr Lior Drukker)