



Nahashon Osinde**Embedded systems engineer** osinde1@outlook.com Thesis defended : Wed 3 Jul 2024 Université Bourgogne Franche-Comté France**Core business****PHASE 1 Evaluation**

In my last year of the PhD, I was able to analyse my own results with respect to the existing results in the literature and provide an evaluation. This helped me in clearly stating my scientific contributions.

- *Evaluates the value of various documents concerning his field of expertise.*
- *Is able to judge his own results in terms of both quality and added value.*
- *Is willing to expose ideas to a critical audience; takes others' opinions of his work into account.*
- *Is willing to evaluate the work of other contributors and provides reasoned, realistic judgments of others' work.*

PHASE 3 Expertise and methods

My PhD research work has been an interdisciplinary project. I have had to gain basic skills in optics, advanced skills in robotics and computer vision. I have then integrated all this towards a biomedical target; improvement of optical coherence tomography.

- *Makes recognized contributions to the advancement of knowledge and innovation.*
- *Is viewed as an international authority.*
- *Possesses in-depth and comprehensive understanding of the strategic orientation of his field of expertise.*
- *Sees opportunities for synergy among different sectors of activity.*
- *Has the ability to develop new investigative methods.*
- *Can work in an interdisciplinary setting.*
- *Is able to devise and coordinate a collective work program focusing on new research problems.*

**Personal and relational qualities****PHASE 1 Communication**

During my PhD studies I have given seminars both to people in the scientific as well as non-scientific community. This equipped me with the skills to describe difficult concepts as easy as possible. I participated to the 'Pint of science' for two years.

- *Knows how to put together a persuasive presentation and communicate about his project or his activity.*
- *Understands, interprets and communicates appropriately in a register suited to his aims and his audience.*
- *Masters a range of communication tools.*
- *Masters his online identity.*
- *Contributes to the dissemination of knowledge within the company, and demonstrates effective teaching skills.*
- *Is proficient in at least English and one other world language.*

PHASE 2 Collaboration

In the second and third year of my Phd, I cosupervised masters student during their internship. We were able to work seamlessly and produce relevant results in the field of optical coherence tomography.

- *Collaborates with people/teams who play a pivotal role on the global scale.*
- *Leads networks and helps to institute dialogue between different entities.*
- *Knows how to establish partnership relations with people working outside his field.*
- *Has the ability to co-produce results and/or innovations.*

PHASE 2 Analysis, synthesis and critical thinking

During my Phd, I have had to read widely and gain skills both in robotics and computer vision with the aim of successively achieving a goal in the biomedical field.

- *Knows how to apply his analyzing and synthesizing abilities to new fields.*
- *Takes ownership of new analytical methods.*
- *Has a novel and independent way of thinking and makes significant contributions.*
- *Questions "business-as-usual" scenarios in his activity.*
- *Advises his staff to help them develop their own capacities of analysis and synthesis.*
- *Stimulates critical thinking among his peers and his staff.*