

# Universidade de Pernambuco

## Programa de Pós-Graduação em Engenharia da Computação (PPGEC)

### Proposta de Dissertação de Doutorado

#### Área: Computação Inteligente

Título: Inspection of transparent industrial products: using Machine Vision.

Orientador – Bruno José Torres Fernandes ([bjtf@ecomp.poli.br](mailto:bjtf@ecomp.poli.br))

Co-orientador – Diego Rativa ([diego.rativa@ecomp.poli.br](mailto:diego.rativa@ecomp.poli.br))

**Descrição** – The global industry is moving forward to Industry 4.0, promoting the fabrication process considering the production quality and cost improvements. Consequently, most industrial companies are adopting machine vision systems to gain an Industry 4.0 advantage [1,2].

Machine vision combines software and hardware for executing functions such as image capture and processing and measurement of critical attributes [1]. In these systems, spatial and temporal resolution and sensitivity are the most critical parameters [3].

In this project, the student will work with different optical techniques (OCT, adaptive optics systems and scanning laser) and different machine vision approach to develop and design devices for different inspections of transparent products of the local industry [4-6].

#### Referências Bibliográficas

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