1. **Name and Academic rank:** Ramzi Fayad, Assistant Professor, full time
2. **Education: Degrees, discipline, institution and date:**

   Ph.D., Manufacturing Engineering and Operations Management, University of Nottingham, UK, 2006.

   M.Sc., Computer Engineering, University of Balamand, Lebanon, 2000

   B.Sc., Computer Engineering, University of Balamand, Lebanon, 1988
3. **Academic experience**
   - Beirut Arab University, Assistant Professor, 2010 - present, full time
   - Lebanese University, Assistant Professor, 2007 – 2010, part time
   - University of Balamand, Assistant Professor, 2007 – 2010, part time
   - USEK, Assistant Professor, 2007 – 2010, part time
4. **Work experience, January 2000 – Sept 2006, Rolls-Royce Derby DE24 0DW**
   - Manufacturing Engineer – Quality Control,
     - Managed all technical aspects of manufacture throughout the product the lifecycle.
     - Established safe working procedures in the area of responsibilities to avoid accident.
     - Managed product introduction and support activities with the supply chain.
   - Stress Engineer,
     - Ensured components meet strength, life and integrity specifications.
     - Undertook stress and life analyses of rotating and static components.
     - Produced life and certification statements compiling engineering critical parts plans.
   - Quality Engineer,
     - Initiated and control quality requirements for diesel engine products involving supplier partners and manufacture design authority standards.
     - Liaised with customers and suppliers to ensure satisfaction is maintained.
     - Managed and monitored the operation of the plant to ensure continuity of production.
5. **Honors and Awards:**
   - Ph.D. scholarship, Rolls-Royce University Technology Centre Sponsorship 2002 - 2006
6. **Service activities**
   - Member of the Faculty of Engineering Board, BAU, 2013 – present
   - Member of the Faculty Student Affairs Committee, BAU, 2012 – present.
   - Member of the Faculty Quality Committee (ABET), BAU, 2012 – present.
   - Member of the Faculty Engineering Day Committee, BAU, 2011 – present.
   - Scientific visits to various industrial plants in Lebanon
7. **Research Interests**
   - Manufacturing Systems
   - Online Monitoring
   - Maintenance
   - Quality Control in Manufacturing System
8. **National Research Cooperation**

   a. Joint research cooperation with ZEINI STEEL to design and assess their facility

plant. (final year projects), 2010 - present

b. Joint research cooperation with KAMAPLAST plastic industry to design and assess their facility plant. (final year projects), 2010 – 2012.

9. Principal publications and presentations:

9.2 Conference Proceedings

- R. Fayad and H. Abou-Chakra. Predictive Diagnosis System for Machine Faults Based on Vibration analysis. International conference on Condition Monitoring (WCCM) BINDT International conference on Condition Monitoring, UK, June 2017

- R. Fayad and H. Abou-Chakra. Lean Production for a Freezing Potato Factory, 5th International Conference on Industrial Engineering and Operations Management. Dubai 2015

- R. Fayad and H. Abou-Chakra. Genetic Algorithm Enhanced Neural Network Applied to Tool Condition Monitoring in Drilling Process. The CM 2013 and MFPT 2013, Krakow, Poland (2013).

- R. Fayad. Cutting Tool Monitoring System for down Milling process using AI Methods. Conference on Computer and Automation Engineering (Singapore 2010)

- R. Fayad. Cutting Tool Monitoring System for Down Milling process using AI Methods. International Conference on Advanced Computer Theory and Engineering (Egypt Sept 2009)

- R. Fayad. Cutting Tool Wear Monitoring applying Support Vector Machines and Genetic Algorithms. International Conference in Advances in Computational Tools for Engineering Applications. ACTEA '09 (NDU July 2009)

- R. Fayad. Online Automated Condition Monitoring and Fault Detection of Machine Tools. 7th Automation and Computer Science Conference (Nottingham 2001)

9.2 Journals

- R. Fayad and H. Abou-Chakra. Online Quality Control Filteration System Used in Hydraulic Oil Process. European Scientific Journal. ESI. July 2014

- Predictive Diagnosis System for Machine Faults Based on Vibration Analysis, Condition Monitoring, an official international publication of the British Institute of Non-Destructive Testing, June 2021.

- Optimization of Supermarket Checkout Counters Using Integrated Greedy Algorithms, BAU Journal - Science and Technology: Vol. 2: Issue 2. (2021)

- Emergency Vehicles Allocation Model for Urban City, BAU Journal - Science and Technology: Vol. 1: Issue 2. (2020)