# *Sacha Nasr*

# +1 647 772 9552 ● 501 St. Clair Ave West Suite 204, Toronto, ON, M5P 0A2, Canada ● nasrsach@gmail.com

**EDUCATION**

**M. Eng. Materials Science & Engineering, *University of Toronto*** **June 2015**

**B.A.Sc. Materials Science & Engineering, *University of Toronto*** **June 2014**

**TECHNICAL SKILLS**

**Programming Platforms**: VBA, Java, C/C++, MATLAB

**Software:** MS Word, Excel, PowerPoint, Project, Visio, CES**,** STATEASE

**Computer-Aided Design:** AutoCAD, SolidWorks, MasterCAM, ANSYS

**PROFESSIONAL EXPERIENCEPlant Engineer, *Jacobs & Thompson Group (J&T) March 2017 - Present***

-Promoted to Production Supervisor after 15 months managing production scheduling, capacity planning in VBA and quality control while handling Certificate of Conformance (COC) requests

-Demonstrated successful project management of new 5-year automotive program representing $3,000,000 of revenue

-Increased margins by 25% managing bill of materials (BOM), production database and process design, meeting part specification and geometric dimensioning & tolerancing(GD&T) in current items/part production approval process(PPAP)

-Designed CNC programming on MasterCAM and tooling in AutoCAD sourcing die suppliers based on cost and product specifications per ISO 9001-2015

- Completed corrective action reports in engineering change reports (ECN) approved by management and quality team used in process failure mode effects analysis (PFMEA) studies

**RESEARCH EXPERIENCEProject Analyst, *University of Toronto*-*Pratt & Whitney Canada (P&WC)* *September 2013 - April 2014***

-Designed turbine engine components in SolidWorks to implement 3D printer technology for rapid prototyping

-Researched failure analysis of 3D-printed stainless steels and conducted finite element analysis (FEA) simulation in ANSYS & MATLAB to assess technical safety from stress analysis

-Ensured technical safety standards were met by analysis of crack growth under cyclic loading using Paris’ Law

-Reduced production cost by 36% per item by developing cost models to compare OEMs for 3D printers

-Managed client-team relationship in weekly project status update to deliver projects on time and below budget

**RESEARCH PUBLICATIONSPowder Metallurgy Research, *University of Toronto***

**Effects of Sinter-Hardening on Hardness and Dimensional Stability of Steel Powder Metal Parts (2015)**

Researched quality/process improvements via SPC by redesigning powder alloy and sinter-hardening process at lower cooling rates for dimensional control and considerably lower production cost

**Wear-Resistant Copper-Graphite Composite Welding Tips Produced by Powder Metallurgy (2015)**

Researched quality of welding tips by determining models to predict maximized electrical conductivity, density and wear resistance while utilizing scanning electron microscopy (SEM) for microstructure characterization

**ACHIEVEMENTS**

Dean’s Honours List (2014)

Certificate, Entrepreneurship, Leadership, and Innovation in Technology and Engineering (2015)

Professional Practice Engineering Exam (2019)

**LANGUAGES**

French (Fluent), Spanish, Portuguese (Advanced), German, Mandarin Chinese (Intermediate)