

# JITHIN MATHEW GEORGE

## MECHANICAL ENGINEER

High-achieving Mechanical Engineer offering 7 years of manufacturing industry experience at conceptualizing and translating innovative mechanical designs into engineering solutions that exceed customer expectations. A critical thinker with hands on experience at designing a variety of systems from composites and seating systems, to business aircraft and flight simulator systems. Continuously improves operational practices while naturally enhancing collaboration between multidisciplinary teams to strengthen results. Takes ownership to expand professional development to continuously improve leadership and technical skills.  
**Open to relocation.**

### WORK HISTORY

#### MECHANICAL DESIGN ENGINEER (R&D)

Arconas Corporation, Mississauga, ON, Canada

March 2020

Contract

Top manufacturer of high-performance furniture for airports and transportation terminals.

**Role Purpose:** To support the R&D Department by providing engineering support to Operations, Production, Marketing, Sales and our customers.

- Developed custom airport & lounge seating designs by:
  - Selecting materials meeting sustainability (cradle-cradle) and quality goals within applicable regulatory framework (BIFMA).
  - Verifying design intent through applying rapid prototype principles such as additive manufacturing (3D printing), saving 32 hours of design modification time.
  - Using SolidWorks platform and PDM Vault to create respective bill of materials (BOM) and drawings of parts, assemblies, sheet metal (stamping), aluminium extrusions, castings, injection moulded parts, and wood.

#### MECHANICAL SYSTEMS ENGINEER

CAE Inc, Montreal, QC, Canada

January 2019 to January 2020

Contract

Worldwide leader in training for the civil aviation, defence and security, and healthcare markets.

**Role Purpose:** To design and validate engineering solutions on flight simulator training devices and systems for civil & business aviation customers.

- Saved \$23k and 310 manhours on design modifications by developing cost-effective sustainable hardware solutions using Design for Manufacture & Assembly (DFMA) methodologies including Restriction of Hazardous Substances (ROHS) compliance.
- Delivered \$78k of projects through cross functional engineering teams using Product Design Management via Agile Scrum & JIRA on flight simulator systems like Instructor Operating System, Forward Facing Instructor Operating System, Visual Systems Interfaces, Electrical Equipment Interfaces, Non-Simulated Area Interface (NSA), and Simulator/Cockpit Structure Interfaces.
- Analysed drawings, CAD, specifications, and requirements for customers using PTC Creo 3.0, PLM Windchill & Micro-Station.



Canadian Permanent Resident



Toronto, ON, Canada



georgejithin87@gmail.com



437.772.9842



linkedin.com/in/jithinmgeorge



### AREAS OF EXPERTISE

- Project/Product Management
- Problem-Solving
- PTC Creo/Pro-Engineer (9500 Hrs)
- SolidWorks (3500 Hrs)
- Catia v5 (3000 Hrs)
- OnShape
- 3D CAD
- Windchill PLM
- PDM Vault
- 3D Printing (Additive Manufacturing)
- Composite Material Manufacturing
- Rapid Prototyping
- NPI / NPD
- Change Management (ECR/ECN)
- Agile-Scrum/Jira
- SAP (ERP)
- Micro-Station
- NCMS
- Product Data Management
- GD&T
- MS Office Suite
- Python (Beginner)



### EDUCATION

- **M.Sc. Management**  
Sullivan University  
USA, 2016
- **M.Sc. Mechanical Engineering**  
Wichita State University  
USA, 2013
- **B.E. Mechanical Engineering**  
Manipal Institute of Technology  
India, 2009



### CERTIFICATIONS

#### LinkedIn Learning, 2020

- Agile NPD for Manufacturers
- Agile Change Management for Manufacturers
- Rapid Prototyping for Product Design

## METHODS ENGINEER

**Bombardier Aerospace**, Toronto, ON, Canada

Global leader and manufacturer of innovative aircrafts and trains.

January 2018 to January 2019

Contract

**Role Purpose:** To optimize processes and reduce downtime for the final assembly line (Global 7500 business jet program)

- Improved cycle time by 33% through documenting user-friendly work instructions based on engineering drawings for aircraft systems integration and production line across structural, mechanical and electrical assemblies.
- Prevented 154 hours of downtime when acting as Aircraft Co-ordinator & Production Lead by directing resource allocation, and managing shop tools, safety and logistics.
- Collaborated with engineering teams to accelerate implementation timeline by 18% through optimizing production methods using CATIA-V5 and SAP to manage compliance, technical responses and non-conformities.

## MECHANICAL ENGINEER

**PAC Seating Systems**, Palm City, Florida, USA

Fastest-growing company in the business jet aircraft seating industry.

April 2013 to April 2017

Full Time

**Role Purpose:** To design, develop, test, configure, collaborate and manage viable VIP aircraft seating solutions and products.

- Delivered \$152k of aircraft seating designs (cradle to cradle development) by:
  - Designing with inherent DFMA principles using Pro-Engineer (Creo), Catia V5/SolidWorks and Ansys platforms to deliver on reliability, durability, manufacturability, production-time, cost reduction, ergonomics and customer satisfaction.
  - Configuring seating products using sheet metal (stamping), machined & injection molding components, aluminium, steel, stainless steel, glass-fibre sandwich composites (honeycomb, wood and foam).
  - Mobilizing cross functional teams to resolve, track, and document issues.
  - Managing technical design deliverables such as modelling, prototyping, BOM revision, weight & part numbers, and releasing production drawings of components.
  - Leading initiation, reviews and implementation of Engineering Change Management and Root Cause Analyses.
  - Creating design documentation and FAA compliance reports.
  - Performing experimental design and development through leveraging 3D printed parts and assemblies (Stratasys Fortus 250mc).
- Improved production throughput by 62% through implementing user-friendly drawings and efficiently interfacing between production and prototype design teams.
- Achieved over 7500 hours of design experience with Pro/E wildfire/PTC-Creo 3.0 with Windchill PLM environment and 3500 hours of design experience with CatiaV5/SolidWorks.

## ENGINEERING TRAINEE

**CAD Centre Enterprises Limited**, Kerala, India

Certified CAD training company with a mission to digitalize the engineering industry

August 2009 to August 2010

**Role Purpose:** To bring optimal value output to projects via application of Cad training skills.

- Earned professional and associate certifications on platforms like Creo, Inventor, CATIAV5, Auto- CAD, Primavera3, Primavera 6.
- Co-developed engineering documentation such as Bill of Materials (BOM), technical drawings and engineering specifications.
- Gained public relations and organizational skills in a diverse environment by performing various small-scale projects with both internal and external clients

edX, 2020

- Hyperloop: Changing the Future of Transportation
- Electric cars: Introduction to EV Mobility
- Drones and Autonomous Systems
- Introduction to IoT

Coursera, 2020

- Introduction to Virtual Reality
- Introduction to Augmented Reality and AR core
- AI for Everyone

Udemy, 2020

- Programming with Python



## PUBLICATIONS

- **The best leadership style for self-managed teams**, authored by J.M George & D. Hinkes  
Published in "International Journal of Business and General Management (IJBGM) by The International Academy of Science, Engineering, and Technology (IASET).



## RESEARCH EXPERIENCE

- **Thesis**, 2014  
Study of Impact Resistance of Carbon Epoxy Laminate Composites
- **Senior Design Project**, 2009  
Semi-Auto Sliding Door via Infrared Sensors
- **Internship**, 2008  
Mechanical Maintenance Engineer (Ammonia Production Plant)
- **Seminar**, 2008  
Jet Propulsion and Rocket Technology



## INTERESTS

- Hyperloop Transportation
- Sustainable/Eco Design
- Virtual & Augmented Reality
- Urban Air Mobility (UAM)
- Electric Vehicle (EV) Mobility
- IoT & AI
- Blockchain Tech