Jassim Abdul Gafoor

+97459914009 • jgafoor56@gmail.com • **jga4.com**

Experience

Proprietor/Business Owner — Coimbatore, India
JGA4 Consultancy — September 2025 - Present
- Providing high output project management services and engineering professional expertise as required
- Managing all business responsibilities including invoicing, sales, tax compliance

Project Co-ordinator II — Vancouver, BC
Food Process Solutions — July 2023 - July 2025
- Managed over 20+ high-value industrial equipment projects (USD 50 million+), Maintained and delivered on scope, budget, schedule while focusing on excellent client relationship
- Implemented python scripts using software APIs, leading to workflow and process optimizations reducing administrative manhours by 90%
- Collaborated with 10+ colleagues to implement new installation safety program and procedures. Developed training materials for over 200 on-site resources and ensured compliance with new safety procedures
- Produce technical specifications, plans, procedures and other design documentation as required

Robotics and Coding Instructor — Vancouver. BC
Sparks Academy — February 2023 - June 2023
- Delivered engaging coding, robotics, and STEAM lessons to over 15 K–7 students in weekly classes and camps.
- Designed and implemented 10+ STEAM-based projects that improved student participation and creativity.
- Led the development of a new makerspace, increasing hands-on learning opportunities by 40%.
- Created custom curriculum content, resulting in a 25% increase in student retention across sessions.

Jr. Mechanical Engineer — Doha, Qatar and Coimbatore, India
Prema Precision Technology — June 2021 - July 2022
- Designed and develop mechanical systems and components using SolidWorks as per client requirements
- Prepare technical drawings for CNC Vertical Turning and Milling Machines ensuring high quality and yield
- Assisted with management of ERP, cost accounting and tax compliance monthly

Telecommunication Engineer (Co-op Work Placement) — Vancouver. BC
TELUS — July 2019 - April 2020
- Migrated data from Sharepoint to Atlassian Confluence and reviewed over 3000 engineering standards
- Ensured compliance with telecom standards and conducted routine audits for system integrity and adherence
- Utilized dormant enterprise bridge software and automated transfer of item catalogs into Confluence

Education

University of British Columbia — Vancouver, BC
Bachelor of Applied Science in Integrated Engineering (Washington Accord) — Graduated in 2021
Relevant coursework: Control Systems, Mechatronics, Engineering Design Projects

Doha College — Doha, Qatar
High School Robotics, Edexcel Outstanding Achievement Award — Graduated in 2016
A-Levels: Mathematics, Further Mathematics, Physics, Chemistry, Design Technology

Certifications

Applied Data Science Program (MIT Professional Education) — January 2023 - April 2023
- Built Facial Emotion Detection Model as Capstone Project - Achieved 92% accuracy

Certified Associate in Project Management — Expected Completion December 2025
- Project Management Institute

Engineer-In-Training (Engineers and Geoscientists British Columbia) Registration Expired in 2022

Additional

Language Skills: English (Native), Tamil (Intermediate), French (Beginner)
Technical Skills: Python, 3D modelling, Data Viz
Interests/Hobbies: Volleyball, Indoor Climbing (Bouldering), Sketching, 3D-printing

Relevant Projects

Smart Skin Body Tracking Project (UBC IGEN 430) August 2020 - June 2022

- Designed sensor-housing modules using CAD to house UWB sensors development boards
- Used Python scripting and MATLAB to log data from sensors for tracking
- Developed the prototype further as part of the APSC Summer Entrepreneurship program with UBC
- Secured 8000 CAD in funding with Entrepreneurship program at Qatar Business Incubation Center

3 Input NAND Cadence Layout (UBC ELEC 402) October 2020 - November 2020

- Designed 3-input NAND gate layout using Cadence Virtuoso with a 45nm CMOS technology node.
- Created schematic and symbol views in Cadence and verified logical correctness through simulation.
- Performed DRC (Design Rule Check) and LVS (Layout vs Schematic) verification to ensure manufacturability
- Analyzed parasitic capacitance and resistance through post-layout extraction for delay and power estimation.

UBC Thunderbikes (Safety Officer & Founding Member) May 2018 - September 2019

- Founded UBC ThunderBikes, a student engineering team focused on building electric motorcycles for the Formula Lightning competition.
- Oversaw safety protocols and conducted tool training for over 20 team members.
- Converted standard bicycles to electric-powered prototypes.
- Supported high-profile electric prototype project with direct engagement from UBC leadership.
- Led recruitment efforts and interviewed 15+ candidates to expand the multidisciplinary team.

FPGA Simple iPod (UBC ELEC 402) January 2019 - February 2019

- Designed hardware using SystemVerilog and FPGA to read from flash memory.
- Implemented FSMs and modular reusable code.
- Practiced SystemVerilog, C, Git and remote lab work skills

Exoskeleton Project (UBC IGEN 330) September 2018 - April 2019

- Designed and prototyped a lower-limb exoskeleton to assist children with Spinal Muscular Atrophy (SMA).
- Implemented pulse-width modulation (PWM) control to actuators to replicate natural gait movement.
- Developed embedded control systems using microcontrollers and motor drivers for joint actuation.
- Conducted kinematic and biomechanical analysis to refine range of motion and joint flexibility.
- Led electrical system design and collaborated with a 6-member interdisciplinary team for system integration.

MEMS Gyroscope Project (UBC ELEC 455) September 2018 - December 2018

- Designed a Micro Electro-Mechanical Gyroscope (0.2mm x 0.2mm) (Solidworks)
- Completed Schematic capture (Cadence) to ensure design sensing requirements were being met
- Modelled electrical to mechanical domain coupling (Simscape and Simulink) before fabrication
- Generated fabrication mask layouts (Clewin) for manufacturing using the SOI-MUMPS process

Phone Heater Case (UBC IGEN 230) September 2017 - April 2018

- Engineered a thermally insulated phone case to extend smartphone battery life in sub-zero temperatures.
- Integrated a low-power heating element and temperature sensors controlled by a microcontroller for automated thermal regulation.
- Conducted thermal testing across varying ambient conditions to validate performance and efficiency.
- Created enclosure prototypes using 3D modeling tools and fabricated using rapid prototyping techniques.

UBC AeroDesign (Landing Gear Sub-Team) October 2016 - April 2017

- Collaborated in a 4-person team to design and fabricate the landing gear for a competition-grade aircraft.
- Engineered a new suspension system to accommodate increased payload capacity of a redesigned airframe.
- Built a custom test rig to simulate landing impacts and validate durability under low-risk conditions.
- Achieved 3rd place overall in the SAE Aero Design 2020 competition..