Mohit Chand

Pune, India

in

mohit957@gmail.com

PROFESSIONAL SKILLS

- BMS & MCU
- HW Design
- EMI/EMC & Magnetics
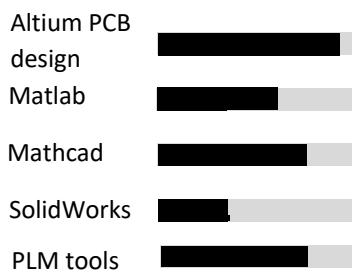- Power Electronics

TOOLS
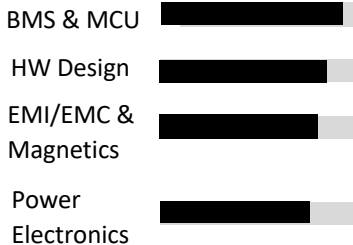
- Altium PCB design
- Matlab
- Mathcad
- SolidWorks
- PLM tools

ACHIEVEMENTS

3 Patents filed on "SOLID-STATE BATTERY MANAGEMENT SYSTEM FOR HIGH CURRENT APPLICATIONS"

Published IEEE Paper on Neutral Point Clamped Inverter controls, [2325-9418](#)

Exceeded Expectation Award from Bombardier for the year 2019

INTERESTS

Tennis

Writing Articles

Book Reading

SUMMARY

With over **11 Years** of experience, Worked on Battery Management Systems (BMS) for Automotive and Energy Storage domain. In terms of Power Electronics Products, I have worked extensively with Motor Controller (MCU) design for few kW, with FoC algorithm for BLDC. Apart from that, I have also developed Battery Chargers for kW, HV applications using PFC, PSFB, LLC design.

Can independently work on Schematic, Design calculations using Mathcad, PCB layout and routing using Altium, and Hardware board bring-up. Magnetic design and EMI/EMC design are the key focus area that I love to excel.

CAREER

<u>Employer</u>: *Atomberg Technologies, Pune:*

Lead Power Electronics Engineer   March 2023 – Sept 2024

Headed the division for Power Electronics with focus on Motor Controller and Battery Charger design and development for Automotive applications.

Setup complete lab for Power Electronics from scratch and help build a team of 10 super talented individuals.

Key Design focus was on gate driver with bootstrap & Charge pump, selection of Mosfet, thermal design on heat-sink, ripple current calculations for DC-link caps

<u>Employer</u>: *AutoMotivePower (AMP), LA USA/Bengaluru:*

Sr. Hardware Design Engineer   Sept 2019 – March 2023

Designed EMI-EMC filters for OBC 11kW 400V, validated the design and worked on multiple production releases

Designed and Productionized Battery Management system HW for Low as well as **High Voltage** applications. Key design was linked with the 5us response time for short circuit protection and current sensing.

<u>Employer</u>: *Boson Motors, San Jose USA/Pune:*

Power Electronics Engineer   Nov 2018 – Sept 2019

Lead a team to develop electric vehicle products with power electronics focused

- Developed On Board Charge Control Strategy using Rapid Prototyping.
- Deigned PFC and PSFB topologies with proto stages from control to HW design
- Key focus was on Matlab control strategy development and HW design.

<u>Employer</u>: *Bombardier Transportation Pvt Ltd, Vadodara:*

Propulsion Control Engineer   May 2015 – Nov 2019

Worked and developed control Algorithms for Locomotives and high-speed Electric trains for converter control

- Worked on Electrical Braking for Trams and FoC algorithms for Motor Controls
- Worked on on-site high stress quick result environment in Melbourne, Australia, and Middle East to deliver customer projects.

EDUCATION

2013 – 2015	Masters in Power Electronics	**IIT** Gandhinagar, India
2009 – 2013	Bachelors in Electrical and Electronics	RKGIT, UP, India