

RISHIK KUDUVA

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DAF Trucks N.V.
Eindhoven
Netherlands

02.08.2024

Application for the position of Powertrain Thermal Domain Owner

Dear Madam/Sir,

I, Rishik Babu Kuduva Rajendra Selvam, apply for the position of Powertrain Thermal Domain Owner at DAF Trucks. I bring my experience in combustion modelling especially in ANSYS.

Currently I work as **Thermal Simulation Engineer / project specific thermal simulation lead** at Automotive Cells Company (ACC) Deutschland GmbH, Kaiserslautern for the development of EV battery cells/modules, including the framework of battery thermal performance with cooling and thermal propagation. Electrothermal simulations and CFD simulations are part of the tasks.

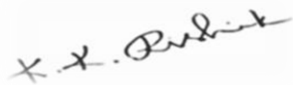
Prior to joining ACC, I worked at Tenneco Federal Mogul Ignition GmbH, Burscheid, Germany as a **3D CFD Combustion Simulation Engineer** for the development of pre chamber spark plugs in combustion engines both stationary gas and automotive applications. Reaction based model was applied to predict premixed methane, hydrogen (H₂), and direct injection isooctane combustion.

My simulations included aerodynamic flow analysis, combustion flame development, heat transfer. **ANSYS FORTE, FLUENT and AVL FIRE** have been used for the simulations. SpaceClaim was used for Computer Aided Design (CAD) changes as part of the design modification.

Earlier for my master's curriculum, **Ford Motor Company, Cologne, Germany** gave me an opportunity to work full time for my dissertation within Gasoline Engine Development primarily with 3D-CFD simulations using **CONVERGE CFD and EnSight**. My focus was on analysis of the effect of in-cylinder flow field and injector geometries on the mixing behaviour of CNG direct injection. Alongside, I developed methods and processes to investigate the ignition delay behaviour of surrogate fuel blends based on gasoline with available reaction mechanism.

My earliest possible date of joining would be 01.11.2024 or earlier subject to discussion and I'm willing to relocate near Eindhoven. My expected gross salary range would be between 82000 and 90000 EUR per annum.

Thank you and best regards,



Rishik Babu Kuduva Rajendra Selvam