

[Full Name]

[Address] | [Phone Number]

[Email Address] | [LinkedIn/Portfolio URL]

[Date]

[Hiring Manager Name]

[Department Name]

[Company Name]

[Company Address]

Re: Application for [Job Title] - [Reference Number]

Dear [Hiring Manager Name],

I am writing to express my strong interest in the [Job Title] position at [Company Name]. With a [Degree Level] in Mechanical Engineering and a specialized focus on Computational Fluid Dynamics, I have developed a robust technical foundation in simulating complex [Internal/External] flows, heat transfer, and [Specific Physics, e.g., Turbulence/Multiphase] phenomena.

During my tenure at [Current/Previous Company or University], I led CFD analysis for [Project Name], where I utilized [Software Name, e.g., ANSYS Fluent, OpenFOAM, or Star-CCM+] to optimize [Component/System]. By implementing advanced meshing strategies and [Specific Numerical Method], I achieved a [X%] improvement in [Performance Metric] and successfully validated simulation results against experimental wind tunnel/test rig data.

My technical expertise includes proficiency in geometry preparation using [CAD Software], automated scripting with [Language, e.g., Python/C++], and post-processing to translate high-fidelity data into actionable design recommendations. I am particularly drawn to [Company Name] because of your recent work in [Specific Company Project or Innovation], and I am eager to apply my analytical skills to enhance your engineering workflows.

Thank you for your time and consideration. I look forward to the possibility of discussing how my computational expertise and mechanical engineering background can contribute to the success of the [Department Name] team.

Sincerely,

[Full Name]