



Position Description: CFD Staff Mechanical Engineer (CAE) - MS or PhD

Location: Portland, OR Hiring: Immediate

We are looking for a mechanical / aerospace engineer with the passion and drive to create advanced multiphysics and thermal/fluid simulations of complex systems. Our clients turn to us to solve their most difficult simulation challenges. We have a nationwide reputation for providing state-of-the-art analyses across broad industrial sectors from medical, aerospace, marine, automotive, chemical, mining, and general consumer products. If you strive to be a world-class simulation engineer, this is the place for you.

What we Require

- Minimum 3 years as full-time simulation engineer
- MS in mechanical or aerospace engineering with course work in fluid dynamics, heat transfer, and/or dynamic systems
- Applied experience with non-compressible flow, thermal fluid analysis, or 1D system modeling
- Experience with commercial CFD codes and 1-D modeling environments (STAR-CCM+, FLUENT, Simulink, AMESIM)
- Demonstrative communication skills via written reports and oral presentations
- Comfortable writing high-quality engineering prose for proposals and reports
- Someone that wants to be part of a team setting the bar for state-of-the-art finite element analysis simulations

What we Desire

- PhD in mechanical or aerospace engineering
- Broad experience with multiphysics analysis including solid mechanics, thermal-fluid dynamics, combustion, and electromagnetics
- Experience with compressible flow including trans-sonic and hypersonic conditions
- Experience with design optimization
- Demonstrated process automation experience using scripting (VBA, Matlab, Python, C++, Java, etc.)
- Ability to quickly learn new analysis techniques from linear dynamics (e.g., PSD) to composites to fluid structure interaction (CFD/SPH/DEM/ALE)
- US citizen or ability to work on sensitive projects
- Experience writing proposals or quoting project work

What Your Work Life Could Look Like

There is very little repetition at Predictive Engineering. We are specialists across many different industries and are experts when it comes to simulation. For engineering services, our clients span a broad range of industries from building services, boiler manufacturers, marine, aerospace, and renewable technologies. We also provide technical support to a number of clients, where a large focus is in cutting edge aerospace systems including hypersonic vehicles. In addition to being a physics and mathematical genius, the ideal candidate must also have a strong ability to directly interface with clients and take projects from inception to completion.

A key theme through all these projects is our dedication to high-quality documentation. Our engineering reports are how we effectively communicate our results to the end clients and although time consuming, it allows us to verify our analysis work and ensure its accuracy.

Compensation

We expect to start you at a competitive salary between \$90,000 to \$115,000 with subsequent yearly salary reviews.

How to Apply

Send us a brief cover letter with your current resume. We would also appreciate seeing an example of your engineering analysis work in graphical format. Please be kind to us and keep your submittal as brief as possible. One can contact us via our website's Contact page.

Predictive Engineering, Inc. is an equal opportunity employer. We promote bike commuting and advocate healthy lifestyles. Predictive offers a 401k pension plan with a matching contribution and health care benefits.