Job Posting

Aero Systems Engineering conducts aerodynamic testing of aircraft components at a laboratory located in Plymouth, MN. Our customers include Boeing, General Electric, Rolls-Royce and many other aerospace companies. Growth in the area of aeroacoustics and unsteady pressure measurement requires additional qualified staff to develop procedures, measurement techniques and data processing algorithms to support this work.

We have received NASA funding through the Small Business Innovation Research (SBIR) program to support the initial effort in this area. The program involves measurement of noise from the exhaust flow of turbofan engines in a transonic wind tunnel. The budget includes provision for a temporary half-time position through May 2006. The work required is similar to a university research program and can be expected to satisfy the requirements of a Masters Thesis. Permanent employment and/or continuation as a Doctoral student is expected if program growth is realized.

The ideal individual to fill this position will:

- be a first year graduate student or a undergraduate expecting to enter the AEM graduate program by Fall 2005;
- have general background in aerodynamics and interest in experimental methods, data analysis, and signal processing - knowledge in acoustics is NOT required;
- have mathematical background in (or intention to study) linear algebra, complex variables, statistics, Fourier series, spectral estimation, and filtering;
- be willing to commit to the 21 month duration of the current funding, with the possibility of continuing.

Course work beneficial to the execution of this work includes: AEM 4202, 4203, 5451, 8201-8203, 8261, 8271; Math 4242, 4257, 4567, 5583, 5561/5562; EE 3019, 3025, 4541, 5541, 5542, 8541, 8581. The student/employee is expected to include some of these (or equivalent) courses in their curriculum.

Compensation will depend on level of education. A student in the AEM graduate program will receive compensation equivalent to that earned by a Research Assistant. An undergraduate will earn an hourly wage until entering the graduate program.

For more information contact:

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