

# William R. Connelly

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| Functional Summary                  | Engineering Support Skills include: Component Design, Manufacturing Fixture Design, Test Fixture Design, Component Fabrication, Component Assembly, Test Fixture Fabrication, Test Technician / Data Collection, G&M Code Programming, CNC Operation and Setup, CNC and CAM instruction, CNC Tooling and Equipment Management, Manual Machinist, Manual Tooling and Equipment Management, Supervise Workers, Manage Projects, Write Technical Papers and Reports                                                                                                                                                                  |                               |                                                                                                       |
| Employment                          | 1996 - Present                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Vehicle Research Institute    | Bellingham, WA                                                                                        |
|                                     | Research Associate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                               |                                                                                                       |
|                                     | Participate in the development and manufacture of research project prototypes. Implement engineering designs for test equipment and collaborate on fixture designs and manufacturing plans using ProEngineer v20. Insure components meet engineering specifications and develop manufacturing methods. Perform CNC programming, solid modeling, and machining of components using ProNC v20. Supervise and train student employees to operate equipment. Administer tooling and material budget, contact vendors and suppliers. Specification and ordering of large machine tools, tooling, materials, and specialized equipment. |                               |                                                                                                       |
| Education                           | 1992 - 1996                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Western Washington University | Bellingham, WA                                                                                        |
|                                     | Manufacturing Engineering Technology - Honors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                               |                                                                                                       |
|                                     | Engineering Graphics, CAE Tools, Materials Technology, Foundry and Forming, Machine Metal Processes, Applied Statistics, Design of Experiments, Strength of Materials, Numerical Control Operations, Fluid Power, Manufacturing Economics, Occupational Health and Safety, Polymer Technology, Reinforced Plastics/Composites, Electrical Technology, Process Control Instrumentation, Robotics and Automation, Computer Integrated Manufacturing, Industrial Quality Assurance, Manufacturing Management                                                                                                                         |                               |                                                                                                       |
| Summary of Technical Qualifications | 1994 - 1999                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Vehicle Research Institute    | Bellingham, WA                                                                                        |
|                                     | Implemented DNC network into laboratory linking all CNC machines to central building network. Integrated pro/Manufacture software with computer numerically controlled milling machines. Established vendor relationships for tooling and materials to support research projects, specified and ordered tooling for computer numerically controlled equipment and tool crib. Developed ProEngineer and ProNC software experience and taught ProNC seminars for technology students. Utilized CAM and G&M code programming, fixture design, component DFMA evaluation, and manual machinist skills                                 |                               |                                                                                                       |
| Professional Memberships            | Society of Manufacturing Engineers<br>Certified Manufacturing Engineer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                               |                                                                                                       |
| Patents and Publications            | "Cylindrical Array Characterization"; Published 1998 AIP, 4rt NREL Conference on the Thermophotovoltaic Generation of Power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                               |                                                                                                       |
| Software Skills                     | ProEngineer Solid Modeling<br>ProNC Manufacturing Suite<br>ProMechanica FEA Modeling<br>FastCAM Manufacturing Suite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                               | MasterCAM Manufacturing Suite<br>Microsoft Office Suite<br>Microsoft Power Point<br>Microsoft Project |

