# MOBIS Technical Center North America - Job Description

**Contact:** Kevin McLaughlin, Director of Electric Steering  
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<table>
<thead>
<tr>
<th><strong>Job Title</strong></th>
<th>Software Engineer, MDPS (electric power steering group)</th>
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<tbody>
<tr>
<td><strong>Current Holder of Position</strong></td>
<td>New position</td>
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<tr>
<td><strong>Objective</strong></td>
<td>To support MDPS tools and control implementation in the North American region</td>
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<td><strong>Reporting to</strong></td>
<td>Director, MDPS</td>
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## Key Tasks and Responsibilities

1. **Design interactive user interfaces**
   - Design and implement Interactive User Interfaces to be used for tuning of MDPS (Motor Driven Power Steering system).
   - The interfaces will incorporate Matlab algorithms (or C code) to perform complex computation, read/store data in various formats and interact with CANape (and possibly other softwares) to communicate with the MDPS.
   - Code the User Interface ideally under Matlab (possibly other programming tools).
   - Insure deployment in the field and proper interaction with communication and tuning software (ie: CANape).
   - Expand functionality bases on customer and users feedback.

2. **Software prototyping done in C:**
   - Develop / modify prototype embedded C software for MDPS
   - Create the needed CANape tools for testing and tuning
   - Test software including code simulation, ECU test and vehicle test
   - Assist with SW design architecture.

3. **Lab equipment programming using Labview:**
   - Develop / Modify Labview programs for test bench comprising instrument control, data acquisition, CAN communication.

## Collaborative Working Relationships

- MDPS teams at Mobis R&D center in Mabuk, Korea
- North American MDPS team
- Key customers

## Experience Level

- 2-5 years in embedded software or user interface development

## Educational Requirement

- BS/MS in Software, Computer, or Electrical/Electronic Engineering

## Skills/Experience

- **Required:**
  - 3 years experience in Graphical User Interface development preferably using Matlab
  - C/C++ language programming experience with 3 years experience in Automotive or a similar industry.

- **Desired:**
  - Experience with Labview, Vector Tools (CANape) and CAN protocol
  - Embedded systems development, including configuration management tools
  - Good problem finding and solving ability
  - Good interpersonal skills

- **Plus:**
  - Knowledge of ANSI C/MISRA rules for coding standards
  - Experience in digital & analog control implementation

## Key Result Areas & Success Indicators

- Ability to code, build, flash MDPS software to ECU
- Creation and support of analysis and tuning tools/user interfaces using Matlab, Labview and Vector tools
- Configuration manage and document tool and software development

## Travel Requirements

- 10-20% for business trips, domestic and abroad