We would appreciate learning the details of your computer experience to help us determine if you have the necessary prerequisite knowledge to undertake the MS in Information Technology at Rensselaer. Please return the form with your other mailed application materials or return via e-mail to Ms. Lessa Shear at shearl@rpi.edu.

Place an “X” in front of your primary interest area in Information Technology (choose one):

- Data Science and Analytics
- Software Design and Engineering
- Information Security
- Web Science
- Database Systems Design
- Information Dominance
- Networking
- Mgmt Information Systems
- Info Systems Engineering
- Human Computer Interaction
- Financial Engineering

1. How many years of full-time work experience have you had?

2. If currently employed full time, please indicate your primary area(s) of responsibility within your company or organization:

3. Please indicate your level of experience & expertise in the following programming languages (check as many as apply):

<table>
<thead>
<tr>
<th>Language</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
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<tbody>
<tr>
<td>Assembler</td>
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<td>BASIC</td>
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<td>COBOL</td>
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<td>FORTRAN</td>
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<td>Lisp</td>
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<td>Others: (please specify)</td>
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</table>

4. Please indicate which among the following topics you have learned through your prior study or as part of your job:

**MATHEMATICS:**
- set theory
- Boolean algebra
- combinatorics
- probability
- statistics
- logic & induction

**DATA STRUCTURES:**
- stacks & queues
- linked lists
- trees
- graphs
- hash tables
- sorting
- arrays/matrices
- data structures

**ALGORITHMS:**
- divide-and-conquer
- algorithm design
- Big-O notation
- greedy algorithms
- backtracking
- analysis for worst-case algorithm efficiency
- analysis for expected-case algorithm efficiency

**OO CONCEPTS:**
- classes
- objects
- encapsulation
- information hiding
- inheritance
- polymorphism
5. Below, we have described three Rensselaer courses. Please insert the name(s) and other requested information about the courses you have taken that most closely match the three Rensselaer courses.

<table>
<thead>
<tr>
<th>Rensselaer Courses</th>
<th>Your course name and number</th>
<th>Date of completion of your course</th>
<th>Name of college where the course was taken</th>
<th>Grade you received</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Computer Science I (CSCI-1100)</td>
<td>An introduction to computer programming algorithm design and analysis. Additional topics include basic computer organization; internal representation of scalar and array data; use of top-down design and subprograms to tackle complex problems; abstract data types. Enrichment material as time allows. Interdisciplinary case studies, numerical and nonnumerical applications.</td>
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</table>

Please return this form via mail or email to the main RPI Admissions Office:

Admissions
Rensselaer Polytechnic Institute
110 8th Street
Troy, NY 12180-3590
gradadmissions@rpi.edu