Robotic Research / Automation Internship

Good fields of study to assist with robotics research would be biology, genetics, robotics, computer science or bioinformatics. Due to the complexity of the robotic system, it is very difficult to have all of the required skills to work independently or proficiently. To facilitate an internship in robotics, three different "specialization" areas have been targeted. The three specialization areas are: **Automation** (A), **Robot Programmer** (P), and **Robotic Research** (R). Listed below are qualities with a letter representing the specialization area and the skills needed for that area.

Area	Skill
A,P,R	Detail oriented but also must be able to see the big picture
A,P,R	Proficient use of Microsoft Office applications (primarily excel)
A	Knowledge of the Visual Basic programming language
A	Familiar with the concept of script writing
A	Ability to troubleshoot complex problems
R	Experience in quality control
R	Ability to manipulate data
R	Exceptional communication skills, in particular presentation of complex information
P	Advanced knowledge of Cartesian coordinates (this is a must) This requires exceptional mathematical skills in: -conversion of measurements (must) -linear algebra (must) -trigonometry (optional, not used regularly) -calculus (optional, not used regularly)
P	Basic understanding of the core concepts of machine programming (I.E) -absolute/incremental positioning -firmware commands -setting offsets