

Reymundo (Alex) Gutierrez
Alliance/Merck *Ciencia* Scholar Class of 2010
Studied Computer Science and Engineering at the Massachusetts Institutes of Technology
Pursuing a PhD at the Massachusetts Institutes of Technology

When Alex was little, he would spend afternoons in his grandmother's yard studying bugs. He was fascinated by how they moved and by how ants, in particular, could carry large crumbs. Alex's playtime might be considered among his first field studies.

In high school, he built a hexapod, a six-legged robot that in some ways mirrored the ants he'd observed as a child. He also dreamed of going to the Massachusetts Institute of Technology. He was excited when he heard about the Alliance/Merck *Ciencia* Scholars program and soon applied. When he was chosen as a *Ciencia* scholar, Alex knew he could pursue whatever type of research he wanted. Even if an internship were unpaid, the program's stipend would make volunteering possible.

During his first summer internship, Alex studied motion retargeting, trying to emulate the motion of a person with a robot at M.I.T. He traveled to Europe for his second internship implementing a controller for a pod copter (a type of helicopter) in Spain.

He spent a third summer in Germany, helping analyze the way that light was absorbed by a particular solution and, based on its behavior, predicting the concentrations of different solvents in a mixture. The purpose was to test whether a medicine contained the appropriate amounts of each ingredient.

In college courses, Alex has done work involving next generation bomb disposal, using a four-wheeled robot with human-like features. His job was to find the best way for a person to control the robot and allow it to "manipulate the world intelligently."

Having earned his bachelor's degree Alex aspires to pursue a master's degree at M.I.T in Robotics and Artificial Intelligence and ultimately complete a PhD.