

# GABRIEL BENEL

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<b>Education</b>	<b>Cornell University</b> , College of Engineering, Ithaca, NY <b>Major:</b> Mechanical Engineering <b>Masters of Engineering, 2003</b> <ul style="list-style-type: none"><li>• Focus on Dynamics and Control</li></ul> <b>Bachelors of Science, 2002</b> <span style="float: right;"><b>GPA:</b> 3.4</span> <ul style="list-style-type: none"><li>• Dean's List Fall 1998, Spring 1998, Fall 1999, Spring 2001</li><li>• Elected to Pi Tau Sigma, National Mechanical Engineering Honors Society - October 2000</li></ul>
<b>Relevant Courses</b>	Finite Element Analysis; Feedback Control; Nonlinear Dynamics and Chaos; System Dynamics; GPS Systems; Automotive Engineering; Robot Dynamics, Control, and Design; Intermediate Dynamics; Aeronautics; Heat Transfer; Fluid Mechanics; Thermodynamics; Fluids and Heat Transfer Lab; Properties and Processing of Materials; Mechanical Design and Synthesis; Probability and Statistics
<b>Engineering Experience</b>	<b>BROOKLYN MACHINE WORKS</b> – BROOKLYN, NY <span style="float: right;">December 2003 – Present</span> <ul style="list-style-type: none"><li>• Manufactured components for high end, custom downhill mountain bicycles.</li><li>• Created CAD models of mountain bike stems for production.</li></ul> <b>CORNELL UNIVERSITY</b> – ITHACA, NY <span style="float: right;">August 2002 – May 2003</span> <i>Teaching Assistant</i> <ul style="list-style-type: none"><li>• Assisted professor in administration of a senior mechanical engineering design seminar.</li><li>• Delivered lecture on the mechanical design process to 100 mechanical engineering seniors.</li><li>• Instructed sophomore engineers in mechanical properties and processing of materials.</li><li>• Conducted twice-weekly laboratory sessions in material properties.</li></ul> <b>CORNELL MICRO AIR VEHICLE (MAV) TEAM</b> – ITHACA, NY <span style="float: right;">Fall 2001</span> <ul style="list-style-type: none"><li>• Researched, designed, and constructed unique flapping wing models for MAV applications.</li></ul> <b>CORNELL MOONBUGGY TEAM</b> - ITHACA, NY <span style="float: right;">Fall 2000 – Spring 2001</span> <i>Suspension Team Leader</i> <ul style="list-style-type: none"><li>• Responsible for designing and fabricating suspension system for two person, human powered buggy for NASA competition. The buggy placed second nationwide in 2002.</li></ul> <b>FLUID DYNAMICS RESEARCH LABORATORIES</b> – CORNELL UNIVERSITY <span style="float: right;">Spring 2001</span> <ul style="list-style-type: none"><li>• Received Cornell Alumni Scholarship to work with Professor Charles Williamson studying vortex induced vibrations.</li></ul> <b>CORNELL RIGID AIRFOIL TEAM (RAFT)</b> – ITHACA, NY <span style="float: right;">Fall 1999 – Spring 2000</span> <ul style="list-style-type: none"><li>• Constructed wing sections and assembled composite pieces for asymmetrical airfoil designed to replace traditional cloth sails.</li></ul>
<b>Other Experience</b>	<b>CAYUGA HEIGHTS FIRE DEPARTMENT</b> – ITHACA, NY <span style="float: right;">September 2000 – June 2003</span> <i>Firefighter and Emergency Medical Technician</i> <ul style="list-style-type: none"><li>• Provided fire response, rescue and extrication, and emergency medical care.</li><li>• Participated in frequent fire and rescue training. Led rope systems training for 15 firefighters.</li><li>• Responsible for maintenance and upkeep of fire station facility and apparatus.</li><li>• Awarded “Diehard Award” by the Chief of Department and “Rescue Directors Award” in 2003 for service above and beyond the call of duty.</li></ul> <b>CAMP RAMAH IN THE BERKSHIRES</b> – WINGDALE, NY <span style="float: right;">Summers 2001, 2002, 2003</span> <i>Outdoor Educator</i> <ul style="list-style-type: none"><li>• Taught wilderness skills and leadership to groups of teenagers.</li><li>• Planned multiple weeklong hiking and biking expeditions, acted as trip and medical leader.</li><li>• Created wilderness rescue scenario for staff training, involving local emergency agencies.</li></ul> <i>Sailing and Swimming Instructor</i> <span style="float: right;">Summers 1997, 1998, 1999</span> <ul style="list-style-type: none"><li>• Designed daily sailing curriculum for 10 beginner students.</li><li>• Planned and executed daylong sailing excursion, responsible for navigation and safety.</li><li>• Instructed 60 students ages 9-15 years old in swimming technique.</li></ul>
<b>Activities</b>	<b>CORNELL CYCLING TEAM</b> – ITHACA, NY <span style="float: right;">August 1999 – May 2003</span> <ul style="list-style-type: none"><li>• Competed in collegiate mountain bike races in the northeast.</li></ul> <b>WILDERNESS EMERGENCY MEDICAL TECHNICIAN</b> – PITKIN, COLORADO <span style="float: right;">Summer 2001</span> <ul style="list-style-type: none"><li>• Took part in a month long intensive training course for national certification</li></ul> <b>NATIONAL OUTDOOR LEADERSHIP SCHOOL</b> – TETON VALLEY, IDAHO <span style="float: right;">January 2001</span> <ul style="list-style-type: none"><li>• Participated in 15-day backcountry ski expedition emphasizing leadership, avalanche awareness and rescue, personal and group accountability, and outdoor skills.</li></ul>
<b>Skills</b>	CAD – Solidworks, IronCAD, CNC, MATLAB, LabVIEW, Word, Excel, Power Point, TIG welding