

COURTNEY WONG

wong.courtney@gatech.edu • (408) 475-2828 • [linkedin.com/in/cwcourtney](https://www.linkedin.com/in/cwcourtney) • San Jose, CA

EDUCATION	GEORGIA INSTITUTE OF TECHNOLOGY: Atlanta, GA <i>Aug 2015 – Dec 2019</i> <ul style="list-style-type: none">• Candidate for B.S. in Biomedical Engineering, minor in Computer Science• Overall GPA: 3.96/4.00 (Major GPA: 4.00/4.00) CARLOS III UNIVERSITY OF MADRID EXCHANGE PROGRAM: Madrid, Spain <i>Jan – Jun 2017</i>
SKILLS	PROGRAMMING: C/C++, MATLAB, Java, Python. Graduate-level coursework in algorithms, computer modeling/simulation, and parallel programming (MPI). MECHANICAL DESIGN: CAD (Creo, SolidWorks), FEA (ANSYS, Meshmixer, FEBio) APPLICATIONS: LaTeX, Microsoft Excel/Word/PowerPoint, PLM (Windchill, Teamcenter)
WORK EXPERIENCE	ABBOTT LABORATORIES – MECHANICAL ENGINEERING INTERN <i>Jan – July 2018</i> <ul style="list-style-type: none">• Worked under senior mechanical engineer to characterize MRI readiness of legacy Saint Jude Medical pacemakers, ICD's, and cardiac/neuro leads• Designed, successfully implemented, and drafted validation for an alternative fixture to a robotic system, used to position field measurement probes at precise locations inside MRI coils, allowing daily testing to continue during occasional robot downtime• Collaborated with hardware team to redesign copper tools, resulting in improved ease of assembly, repeatability of tests, and accuracy of header pin impedance measurements• Conducted literature reviews and applied physiology knowledge to strengthen rationale in an urgent FDA submission involving an unexpected lead dislodgement in a clinical study• Self-assigned MATLAB project to efficiently extract data from CSV files produced daily in lab GEORGIA TECH CEISMIC – SUMMER CAMP INSTRUCTOR <i>June – July 2016</i> <ul style="list-style-type: none">• Taught robotics concepts using LEGO Mindstorm NXT programming to 4th – 6th graders• Introduced programming basics (loops, switch statements) to convert various sensor inputs to motor outputs for creating interactive animatronic poster boards• Innovated creative additions to the lesson plan such as “mini-games” to encourage a friendly, respectful, teamwork-based environment
RESEARCH & PROJECTS	HOLLISTER LAB – UNDERGRAD RESEARCHER <i>Jan 2019 – present</i> <ul style="list-style-type: none">• Generating an image-based finite element model of interatrial septal tissue to support FDA validation of cardiac implant closure devices SPIROMETER REDESIGN <i>Aug – Dec 2017</i> <ul style="list-style-type: none">• Worked in a team of four to design an improved spirometer that addresses the lack of a cheap yet accurate lung health metric in the current athletic “wearables” market• Designed multiple 3D-printed prototypes using SolidWorks, with improvements in each iteration: manufacturability, ease of assembly, ergonomic fit, and durability• Created an experiment to determine the linear relationship between voltage detected by a transducer inside the spirometer and air speed from the user's forced exhalation CONCUSSION MITIGATION IN SPORTS <i>Aug – Dec 2016</i> <ul style="list-style-type: none">• Worked in a team of eight to design a headband to mitigate concussion in soccer athletes• Modeled in MATLAB the peak acceleration experienced by the head during a head-head and head-ball collision, with and without a headband of variable material and thickness• Compiled 10,000 thickness and density combinations of 26 sample polymers to find the optimal headband design ratio and composition for shock absorption and weight
ACTIVITIES & AWARDS	GEORGIA TECH BADMINTON CLUB <i>Aug 2015 – present</i> <ul style="list-style-type: none">• 2015 UF Gator Smash: 1st in Novice Women's Singles, 2nd in Novice Women's Doubles• 2016 Georgia Tech Badminton Tournament: 2nd in Open Women's Singles and Doubles• 2016 Georgia Games Badminton: 1st in Novice Women's Singles AMERICAN TAEKWONDO ASSOCIATION <i>2007 – 2015</i> <ul style="list-style-type: none">• Achieved 3rd degree black belt ATA certification in June 2014
