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| **James Hunter**  **jamessahunter@gmail.com** | (858) 354-1527  [www.linkedin.com/in/james-hunter123](http://www.linkedin.com/in/james-hunter123) |
| **Education** |
| **M.S. Mechanical Engineering,** December 2021 |
| Georgia Tech, Atlanta, GA  GPA: 3.62 |
| **B.S. Mechanical Engineering,** May 2019 |
| Virginia Polytechnic Institute and State University, Blacksburg, VA |
| **Technical Skills** |
| * Proficient in Microsoft Office * 5 years of experience with MATLAB * Adept at SolidWorks * Coded Line following Robot with PID control on Microcontroller in C++ * Machine Vison used for color-based image segmentation * Machine Learning used to Identify characters: ‘1’, ‘2’, ‘3’, ‘4’ in a binary 7x7 square grid. * Motion planning of Robotic Arm using Inverse Kinematics * Non-Linear/ Digital Controls Courses * Modeling of Dynamic Systems using Lagrangian method * Oxy-fuel, MIG, SMAW Welding * Basic knowledge of mill, lathe * Familiarity with power tools and machining |
| **Projects** |
| **Senior Design Project – Automated Hydroponics,** 2018-2019   * Automated a water monitoring/nutrient delivery system used to dispense 50 mL of solution * Designed a control system with Graphical User Interface in Python with a link to Arduino * Created and built electrical layout for about 90 sensors * Implemented solution with 9 other students   **Research in Assistive Robotics Lab,** 2017-2018   * Created an upper body exoskeleton * Hands-on work with prototyping using basic tools |
| **Work Experience** |
| **Internship with CMC (California Mountain Company),** Santa Barbara, CA2018   * Created a sewing fixture for a multi loop strap using 3D printer and laser cutter * Performed testing of rope with a vertical and horizontal pull machine * Analyzed residual strength of escape lines in Excel * Presented findings and experiences to superiors and other engineers * Lifecycle Performance of Escape Systems Published paper for International Technical Rescue Symposium to inform others of the effects of long-term use of fire escape lines   **Hunter, J.**, Smith, C., Kils, O. and Mayer, T., 2018. *Lifecycle Performance of Escape Systems*. ITRS. |
| **Leadership** |
| **Senior Boy Scout Patrol Leader,** 2009-2010   * Planned all troop meetings to include a main activity, discussion, and game * Taught skills to 40 scouts |
| **Activities** |
| **Theme Park Engineering and Design,** Virginia Tech, 2017-2019 |
| **Honors** |
| **Dean’s List**, Spring 2017, Spring 2018  **Eagle Scout**, 2012  **Order of the Arrow, Boy Scouts National Honor Society,** 2011 |