

Troy N. Tully

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(914) 330-3177

EDUCATION

Westminster College, Salt Lake City, Utah

Expected Graduation May 2020

Major: Bachelor of Science: Computer Science – (3.55/4.0)

Minors: Business (completed) – (3.9/4.0) Math – (3.7/4.0)

Notable coursework:

Machine Learning: Learning techniques including Naïve Bayes, Neural Nets, Deep Learning, Gaussian Discriminant Analysis.

Programming Languages: Examined language frameworks through compiler and OS complexity. Created a Lexer/Parser in YACC and JFLEX

WORK EXPERIENCE

University of Utah, Salt Lake City, Utah

4/19-Present

Research Assistant

- Developed a method of converting LeapMotion infrared hand Tracking data to track hand kinematics to control prosthetics for intact users.
- Created new decode algorithms for prosthetic control utilizing EMG data and Neural data.
- Co-Author on a research article utilizing the hand tracking algorithm prosthetic control.
- Currently developing an algorithm for amputees to utilize an EMG sleeve to imitate a keyboard for better amputee employment and self-independence.

United States Ski Team, Park City, Utah

12/18-Present

Software Developer Intern

- Developed an iOS app to collect, store, and process kinematic data of skiers during training and competition via external Bluetooth sensor
- Analysis of accelerometer and gyroscope data determines number of turns, joint angles, leg dependency, length of training
- Data collected for use by sport science department for management of fatigue/training load
- Collaborated closely with a lead engineer from MoveSense (Suunto)

Freelance Visual Content Creator, Park City, Utah

01/14-Present

Self-Employed

- Designed, built, and maintained 20+ aerial photography drones
- Tuned flight characteristics with PID controller
- Independently learned PDB, ESC, and Motor soldering
- Worked with a variety of large, well-known brands (such as Bose, Columbia Sportswear, Toyota, HolidaySwap, Pacifico, Oakley) to create, post, and curate content
- Obtained Drone Pilot license (FAA 107)
- Grew and maintained a verified Instagram account with 3.9k followers and growing

United States Ski Team, Park City, Utah

01/14-04/18

Athlete

- 1st alternate to the 2018 Olympic Winter Games
- Traveled internationally as a representative of the U.S. Ski Team
- Maintained rigorous training schedule often 12+ hour days
- Contracted ambassador for Bose, Columbia, and Oakley
- Lead personal fundraising efforts totaling over \$30k in donations

TECHNICAL SKILLS

- **Computer:** Proficient with Adobe Premiere, Lightroom, Illustrator, Photoshop, Visual Studio, Unity, Eclipse
- **Computer Languages:** Proficient: MATLAB, Java, Python, Git / Familiar: C++, C#, C, Linux, ML, Haskell, Swift,
- **Language:** Intermediate Spanish
- **Miscellaneous:** Soldering, Brushless motor wiring, GNUPlot

EXTRACURRICULAR ACTIVITIES/ACHIEVEMENTS

- Volunteer Tax Clinic for low income families
- Dismantling, cleaning, and re-assembling of camera lenses
- 2017 and 2018 North American Cup Grand Prix Champion