

JOHN WILL III

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EDUCATION

Virginia Tech ICTAS Doctoral Scholar	Ph.D. in Materials Science and Engineering GPA: 3.87 GRE: Math – 166, Reading – 165	August 2018-present
The University of Texas at Dallas Eugene McDermott Scholar	B.S. in Biomedical Engineering; Computer Science minor GPA: 3.82 SAT: 1600 – Math: 800, Reading: 800	August 2014-May 2018

WORK EXPERIENCE

Virginia Tech, DREAMS Lab (Dr. Chris Williams): <u>PhD Student, ICTAS Doctoral Scholar, Web Manager</u>	Sept. 2019-present
<ul style="list-style-type: none">Exploring the process structure property relationships of 3D printed graphitic carbon via pyrolysis of polyimide precursorsCAD design, manufacture, and optimization of new UV-assisted Direct Ink Write system with in-situ cure capabilities	
Virginia Tech, Advanced Materials Group (Dr. Johan Foster): <u>PhD Student, Lab Manager</u>	May 2018-Dec. 2019
<ul style="list-style-type: none">Transitioned labs after Dr. Foster moved to University of British ColumbiaDesigned and tested low-density high-performance nanocomposites, engineered PLGA nanoparticles for controlled peptide release to treat glioblastoma, and conducted TEM and SEM characterization of cellulose nanocrystals	
Entrepreneurial Startups: <u>Research and Development Associate</u>	March 2017-May 2018
<ul style="list-style-type: none">Adaptive3D and Qaulia MedicalHelped prepare monthly technical updates, planned IP strategy, and traveled to represent interests worldwide.	
University of Wollongong, Intelligent Polymer Research Institute: <u>Visiting Researcher</u>	Summer 2016
<ul style="list-style-type: none">Electrochemically synthesized biologically doped PEDOT conducting polymers for wound healing and drug delivery.	
Stanford University, Zhenan Bao Research Group: <u>Visiting Researcher</u>	Summer 2015
<ul style="list-style-type: none">Helped fabricate and optimize carbon nanotube based flexible transistors for applications in oscillators and displays.	
UT Dallas, Advanced Polymer Research Lab (Dr. Walter Voit): <u>Undergraduate Research Assistant</u>	Sept. 2014-May 2017
<ul style="list-style-type: none">Synthesized super tough semi-crystalline thiolene network polymers (2015-2016).Drafted and synthesized the next generation of cochlear implants using shape memory polymers (2014-2015).	

LEADERSHIP

Blacksburg High School Cross Country: <u>Assistant Coach</u>	August 2018-present
<ul style="list-style-type: none">Training and supporting 100+ high school student athletes on one of the top cross country teams in Virginia	
UTD Varsity Cross Country Team: <u>Captain</u>	Sept. 2014-May 2018
<ul style="list-style-type: none">MVP, ASC All-Conference, ASC Distinguished Scholar Athlete of the Year, 27:00 8k, 16:18 5k, 4:29 Mile, 9:47 Two-Mile	
Peer-Led Team Learning: <u>Student Leader</u>	April 2016-May 2018
<ul style="list-style-type: none">Led physics review sessions in electricity, magnetism, and optics - IMTPC Level 2 Certified	
Polycraft Club: <u>President and Founder</u>	Sept. 2014-May 2017
<ul style="list-style-type: none">Worked as a developer and founded a club to support and expand the UT Dallas educational modification Polycraft for the popular video game Minecraft (www.polycraftworld.com) to deliver topics such as materials science to a broad user base.	

SELECTED PUBLICATIONS

- R. Roberts, J. Smyth, **J. Will**, C. Grek, G. Ghatnekar, Z. Sheng, R. Gourdie, S. Lamouille, J. Foster. Development of PLGA Nanoparticles for Sustained Release of a Connexin43 Mimetic Peptide to Target Glioblastoma Cells. Submitted to Materials Science and Engineering: C, Volume 108, 110191 (2020).
- P. Molino, **J. Will**, A. Harris, Z. Yue, J. Dinoro, P. Winberg, G. Wallace. PEDOT-XRU glycan composite Conducting Polymer Biomaterials for Wound Healing Applications. Submitted to Biointerphases (2021)
- A. Chortos, I. Pochorovski, P. Lin, G. Pitner, X. Yan, T. Gao, J. To, T. Lei, **J. Will**, H.-S. Wong, Z. Bao. Universal Selective Dispersion of Semiconducting Carbon Nanotubes from Commercial Sources Using a Supramolecular Polymer. Published in ACS Nano (2017).

HONORS

ICTAS Doctoral Scholar: 1 of 3 Virginia Tech engineering applicants selected for graduate fellowship	Aug. 2018-present
Phi Kappa Phi Honor Society: Inducted in recognition of academic excellence	Dec. 2019-present
McDermott Scholarship Program: 1 of 25 selected worldwide for merit based full scholarship program	Aug. 2014-May 2018
Wildenthal Honors Program: 1 of ~200 UT Dallas applicants accepted into university honors program	Aug. 2014-May 2018

SKILLS

Hardware: 3D printing, polymer synthesis, thermomechanical characterization, TEM, SEM, AFM, Raman spectroscopy
Software: Drafting (AutoCAD, SolidWorks, Inventor), coding (Java, MATLAB, VBA), presentation (Origin, LaTeX)
Interests: Bicycle touring (youngest ever to ride across the US), endurance trail running, rock climbing (UTD climbing team), backpacking, scuba diving (PADI open water certified), world travel, soccer refereeing (Grade 8)