John "J.D." Squire

(210) 649-7458 | jdsq2018@gmail.com | https://www.utdallas.edu/~jsquire/

Education

The University of Texas at Dallas (UT Dallas), 800 W. Campbell Road, Richardson, Texas 75080

- Major: Biomedical Engineering
- Graduation Year: Spring 2022
- Overall GPA: 3.99, Major GPA: 4.00
- Collegium V Honors Program Student
- Dean's List: Fall 2018, Spring 2019, Fall 2019, Fall 2020, Spring 2021 (top 10% of major, suspended Spring 2020 due to COVID-19)
- UTD Academic Excellence Scholarship Recipient

Skills and Proficiencies

- Java, Python, HTML, CSS, PHP, MATLAB, Arduino, and Microsoft PowerApps programming knowledge
- VEGAS Pro 15 video editing knowledge
- SolidWorks CAD knowledge

Work/Internship Experience

Aug 2021 – present — **Undergraduate Researcher** at the Molecular Imaging and Optical Nanotherapeutics Lab at UT Dallas (10 hours per week)

- Continuation of research at UT Southwestern
- Characterized various nanoscale drugs for head and neck cancers under light-activated, x-ray activated, and γ-ray activated conditions

May – Aug 2021 — **Premier College Intern** at the Air Force Civilian Service (40 hours per week)

- Worked in the 711th Human Performance Wing in the Bioanalytics Section at Wright-Patterson Air Force Base in the Air Force Research Laboratory, focusing on toxicology research
- Utilized HTML, CSS, JS, PHP, Python, GUI development, and machine learning concepts

Jan – May 2021 — **Undergraduate Researcher** at the Molecular Radiation Biology Research Lab at UT Southwestern (40 hours per week)

- A research partnership between UT Dallas and UT Southwestern under the 2021 Green Fellowship
- Acquired imaging data in 3D tumor models for head and neck cancer as well as imaged and modeled time-dependent distribution of x-ray responsive nanoparticles in response to varying doses of radiation therapy
- Investigated the use of light-activatable nanotechnology as a facilitator for radiation therapy in radiation-resistant tumors of the head and neck

May 2020 – present — **Staff I IT Specialist** at MSE Group, LLC (20 hours per week)

- General IT management
- EPA TRI Reporting
- Electronic Stormwater Pollution Prevention Plan (eSWPPP) Development in Microsoft PowerApps and PHP

Jan – Dec 2020 — **Undergraduate Researcher** at the Systems for Augmenting Human Mechanics Lab at UT Dallas (6 hours per week)

- Learned about neural network architecture and building a neural network to identify diseases related to the hip joint

Jun – Aug 2019 — **IT Intern** at MSE Group, LLC (20 hours per week)

- General IT management
- TCEQ Air Quality Permit submittal
- Promotional material designer and project outline editor for Electric Vehicles San Antonio
- Digitized company reference material

Jun 2018 – Jun 2019 — **Undergraduate Researcher** at the Speech Disorders and Technology Lab at UT Dallas (6 hours per week)

- Clark Summer Research Program participant
- Developed MATLAB program that converts speech data into multiple file formats that are supported by the current laboratory data analysis program
- Developed MATLAB program that allows subjects to provide feedback about speech samples generated by a neural network from articulator motion sensors

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Work/Internship Experience (continued)

Jan – May 2018 — **High School Researcher** at Trinity University (40 hours per week)

- Developed Python and R programs to visualize hybrid incompatibilities between alleles at specific loci in the genome of hybrid offspring between strains of the plant *Arabidopsis thaliana*

Professional Affiliations

2018 – present — **Worsfold Grant Selection Committee Member**

- Member of a group that selects student-led volunteer initiatives to be funded by the Worsfold Grant (https://honors.utdallas.edu/worsfold)

2018 – present — **Phi Beta Lambda (PBL) (Future Business Leaders of America)**

- **Vice President of Marketing** (Texas PBL) (2020-present)
- **Fundraising Committee Chair** (UTD PBL) (2018-19)
- 1st place for Administrative Support Technology and 1st place for Cybersecurity, 2020 Texas State Leadership Conference
- 1st place for Website Design and 1st place for Computer Concepts, 2020 Texas State Leadership Conference
- 1st place for Website Design, 2020 National Leadership Conference
- 1st place for Mobile Application Development and 2nd place for Emerging Business Issues, 2019 Texas State Leadership Conference
- 1st place for Mobile Application Development, 2019 National Leadership Conference

2019 – present — **Society of American Military Engineers (SAME)**

- Student Member
- 2019 SAME San Antonio Post Scholarship Recipient
- 2020 SAME San Antonio Post Scholarship Recipient
- 2020 SAME Fort Worth Post Scholarship Recipient

Dec 2020 — **51st IEEE Semiconductor Interface Specialists Conference Staff**

- HTML, CSS, and PHP developer for virtual conference backend
- Facilitated live virtual research poster presentations

2019 – 2020 — **HackUTD and HackDFW Hackathons**

- 24-hour coding marathons located in the Dallas-Fort Worth area

Community Service

Aug 2019 – present — **Freshman Mentor Program at UTD**

- Currently mentoring a freshman to become acclimated to college life

2018 – 2019 — **Society of American Military Engineers (SAME) Operation Float-a-Soldier**

- Volunteer event to provide a fun day to our wounded warriors at Canyon Lake, TX

Mar 2019 — **Freshman Engaged in Service Together (FEST) at UTD**

- Created paracord bracelets to send to active duty military members and veterans

Jun 2015 – Aug 2015 — **Boy Scouts of America Eagle Scout Project**

- Built mobile heavy-duty A-frame signs and replaced old signs for the First Tee of San Antonio