JACOB DONG

#: (720) 277-7368 **@:** jacobjdong@gmail.com

Open to Relocation Opportunities **U.S. Citizen** **www**.linkedin.com/in/jacob-dong

EDUCATION

The University of Texas at Dallas, Richardson, TX — B.S. in Mechanical Engineering — Anticipated: **May 2023**

- Academic Excellence Scholarship — Minor in Computer Science — GPA: 3.93/4.00

TECHNICAL SKILLS

- **Programming Languages:** Proficient in C++, VBA, Python, MATLAB, Java, PHP, SQL, JavaScript
- **Software:** Microsoft Office Suite, SolidWorks, PTC Creo, AutoCAD, Flutter, React Native
- **Languages:** Fluent in English, Mandarin Chinese; Intermediate in Spanish
- **Relevant Completed Coursework:** Computer Aided Design, Data Structures + Algorithm Analysis, Design of Mechanical Systems, Fluid Dynamics, Heat Transfer, Kinematics & Dynamics, Mechanics of Materials, Ordinary & Partial Differential Equations, Professional Technical Communications Computer Programming, Statics, Systems Dynamics Modeling & Analysis, Thermodynamics

WORK EXPERIENCE

Website Developer & Media Specialist, UTD Interdisciplinary Studies, Richardson, TX **Oct 2019 - Present**

- Photograph, video, edit, and document school events for coverage on social media
- Write informational addresses to over 500 recipients (students, staff) on IS Instagram and Facebook
- Edit HTML + CSS source code for 80+ webpages for mobile, desktop, and tablet mediums
- Frequently perform maintenance: updating news pages, reformatting, and building new pages

Mechanical Engineering Intern, Entergy Nuclear (ANO), Russellville, AR **May 2021 - Aug 2021**

- Worked in Systems Engineering, for the Nuclear Steam Support Systems (NSSS) group
- Streamlined package creation process for ultrasonic gas void checks in response to NRC Generic Letter 08-01, Gas Voiding in Emergency Core Cooling Systems
- Revised 12 large scale Piping & Instrumentation Drawings for locating potential gas void high points
- Wrote hundreds of lines of VBA; used Microsoft Access to build an automated void report generator
- Participated in 20+ power plant system walkdowns to evaluate health of components, identify potential preventative maintenance, and monitor changes for various systems

Fulfillment Center Vendor Returns Tech, Amazon.com, Thornton, CO **Apr 2020 - Dec 2020**

- Mastered multiple disciples of packing, including Liquidation, Donation, Recycle, Destroy, WOOT, Grading, SIOC, High Quantity Orders, and LTL Freight Orders
- Used and learned Amazon internal software: Printmon, FC Research, FC Labor Mgmt, and Rodeo
- Managed assembly line of up to 10,000 totes per 10 hour shift

ACTIVITIES

Researcher, UMN Department of Mechanical Engineering, Minneapolis, MN **Mar 2021 - Present**

- Writing a review paper on variety of aerosol filtration technologies
- Processing 250+ academic papers on photocatalytic oxidation, photo-electrochemical oxidation, non-thermal plasmas, electrostatic precipitation, fibrous filtration, UV-C and UV-A irradiation, etc
- End goal is to compile a large wealth of information for current aerosol filtration technologies

HackDFW, Hackathon, SayYesToDallas, Frisco, TX **Oct 2021**

- Built Healthy Habits: Biometric risk factor tracking app built on Android Studio, Google Cloud, MySQL
- Utilized Google Geolocator API, Sleep API, Places API, TensorFlow Lite within the app
- 1st place, State Farm Challenge; 3rd place, Overall Best Hack out of 100+ projects

Research Intern, National Center for Atmospheric Research (NCAR), Boulder, CO **Aug 2018 - Mar 2019**

- Analyzed 50+ parameters of Doppler radar data and evaluated patterns and correlations for the Mesoscale and Microscale Meteorology (MMM) Lab's project on elevated convective systems
- Created 2D and 3D visuals in atmospheric-specific programs such as Unidata IDV and XQuartz
- Wrote and submitted a technical research paper to the American Meteorological Society