
WORK EXPERIENCE

- **ColdSpace LLC (Start-Up)** Buffalo, NY
Software Engineer *Nov 2018 - Feb 2019*
 - Developed a solution to query data from the start-ups remote MySQL database using a solution written in Python that leveraged Python-Peewee ORM, coupled with a series of implemented triggers. The query is crucial in that it sets the combinations to each solenoid-lock protected refrigeration compartment, needed so subscribers can use the start-ups product at the time they reserved their compartment.
 - 'Normalized' pre-existing MySQL database tables to eliminate redundancy and to mitigate scalability concerns.
 - Implemented form-field validation using jQuery and PHP, and added SHA-256 passcode encryption. Created new, and rectified pre-existing, erroneous web-pages; modified with: PHP, MySQL, jQuery, and JavaScript.
- **UB Nano-Satellite Lab** Buffalo, NY
Flight Software Co-Lead *Oct 2018 - Feb 2019*
 - Helped lead a small sub-system of roughly 20 undergraduates understand requirements, develop-code, and unit tests in C++ to meet fulfill expectations, all in a timely manner to meet stringent deadlines set by the AFRL.
 - Performed consistent code-reviews, lead weekly work-sessions 3 times a week, and presented to the AFRL in a teleconference where each lead had to justify software implementation designs and decisions, present formal documentation, discuss software dependencies, future goals, and procedures.
 - Developed software and unit-tests that facilitated communication between the satellite's hardware ADC micro-controller, and I2C bus to regulate and control satellite voltage & current.
- **UB Nano-Satellite Lab** Buffalo, NY
Undergraduate Research Software Engineer *Sep 2016 - Sep 2017*
 - Built various web pages for Mission Control: the web-client that will be used to send commands to the GLADOS Satellite when it is in Space- later in 2019. Web-pages were built using HTML, CSS, JavaScript, jQuery, AJAX.
 - Developed simulations' tests using Python, Flask-Unit Testing Framework, Selenium WebDriver, and MongoDB, to perform form-field validation, and user-driven like web-client simulations.
- **University at Buffalo** Buffalo, NY
Computer Science Teaching Assistant *May 2018 - Feb 2019*
 - **CSE 331 Algorithm Analysis & Design**
 - Lead of Homework Video Implementation and Design: the process of taking the Homework: Algorithmic Programming and Mathematical-Proof Questions, and creating YouTube content for students to use as help with their assignments.
 - Other Duties: Homework & Exam Grading, Invigilation, 1-on-1 Tutoring, Teaching Labs, Hosting Office Hours
 - **CSE 111 Quantitative Analysis**
 - Taught primarily algorithmic and quantitative reasoning techniques and skills to labs of roughly 25-40 students.
 - Other Duties: Homework & Exam Grading, Invigilation, 1-on-1 Tutoring, Teaching Labs, Hosting Office Hours

SOFTWARE PROJECTS *(more at github.com/ihabdulr)*

- **StopBy Android App (Google-Maps API, Java, Firebase NoSQL DB, Node.js):**
Developed through Agile methodology in my Software Engineering course, with 3 others students; this App facilitates location based meeting using Google maps, user-profiles, and a peer to peer messaging system.
- **Contact-Book Desktop App (JavaFX, Java)**
Mac & Windows compatible. Supports adding images, and V-Card Export (Drag & Drop), and URL Support; users can add contacts & their corresponding info, save and load, using this desktop app.

EDUCATION

- **University at Buffalo** Buffalo, NY
Bachelor of Science in Computer Science; GPA: 3.00 *Aug. 2015 - Dec. 2018*

SKILLS

Preferred Lang. & Tech. - Python, C++, Java, PHP, MySQL, Vim, Atom, Unix, Linux

Familiar Lang. & Tech. - Android Studio, Firebase, Google Maps API, JavaScript, jQuery, AJAX, HTML, CSS, MongoDB, Selenium WebDriver, Flask Testing, JavaFX, JavaSwing, Phaser.js