# Dhruv Gajjar

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#### **SUMMARY**

Engineering Physics student from University of Illinois at Urbana-Champaign who is a quick learner, highly analytical, and adaptable. Experienced in data analysis/automation, database structure, and construction and engineering in the energy distribution industry. Brought on process improvement changes in data collection, retention, and reporting at WEC Energy Group by using the ability to incorporate disparate approaches and subjects when solving problems

#### **WORK EXPERIENCE**

## WEC Energy Group/Peoples Gas (Chicago, IL) Performance Engineering Student Intern

May 2018 - Aug 2018

Portfolio Website: https://www.dhruvgajjar.com

**Social:** www.linkedin.com/in/dhruvgajjar

- Project lead in the development and presentation of a demo database using Microsoft SQL Server to introduce the benefits
  of utilizing databases within the Engineering Department, which resulted in approval from the department manager to
  begin the initial steps of designing a plan of execution and cleaning the necessary data sources to ensure data integrity
- Designed VBA programs to rapidly pull and consolidate data from over 300 sources in multiple directories that assisted in cost analysis for future consultant contract negotiations and budget forecasting based on current spending
- Assumed a data analyst role; started the process of automating and standardizing multiple procedures and data sources in the Engineering and Contracts department that led to an increase in quality of data storage and management
- Reviewed and analyzed proposed plans submitted by other utilities to the City of Chicago's Office of Underground
  Coordination to identify possible conflicts with the WEC's existing gas mains and facilities prompting efforts to revise and
  negotiate alternative designs
- WEC Energy Group/Peoples Gas (Chicago, IL)
   Distribution Engineering Student Intern

Jun 2017 - Aug 2017

- Designed and implemented an automated quality assurance VBA program for job-site measurements, which is still currently utilized as a tool by the current team of engineers and saved hours of manual data entry
- Performed 10 field audits for upcoming construction projects to ensure compliance with Chicago's regulatory rules
- Modeled Synergi gas flow simulations for proposed mains to determine if construction would be non-intrusive to the area
- o Integrated pipeline retirement changes in the company's ESRI GIS mapping software once new pipe was installed

#### **EDUCATION**

## University of Illinois at Urbana-Champaign; College of Engineering

**Expected Graduation: Dec 2018** 

B.S. in Engineering Physics; Specialization in Mechanical Engineering
 GPA: 3.37/4.00

Relevant Courses: Intro to Computer Science; Intro to Data Science; Intro to Databases; Applied Linear Algebra

#### **PROJECTS**

## Mass Produced Electro-Mechanical Invention/Innovation; Course Name: Computer Aided Design

- Collaborated with a team to create a product that solves a commonly faced problem. Designed an easy-to-use clothing iron attached to an ironing board which is ideal for tight spaces and frequent travelers. Deliverables: 3D CAD models, engineering drawings, and a cost analysis of materials and manufacturing processes used
- Projectile Launcher Simulation and Design; Course Name: Introduction to Dynamics
- Contributed Engineering Physics background to the testing, experimentation, and simulation of the projectile and environment conditions. Deliverables: a report of the simulation and experiment and a working, testable prototype

### **VOLUNTEERING EXPERIENCE, EXTRACURRICULARS, & AWARDS**

#### • Alpha Phi Omega Service Fraternity Events

Jan 2017 - Present

Held four high-level leadership positions within the fraternity and completed 100+ hours of community service

College-Level Math and Physics Tutor

Aug 2014 - May 2016

Illinois Student Assistance Commission Scholar

Jun 2015 Jun 2015

Prairie State Achievement Award: Reading, Mathematics, and Science

## **SKILLS & CERTIFICATIONS**

- **Software:** Autodesk Inventor, Microsoft Access, Microsoft SQL Server, Synergi Gas, Creo Parametric 3.0, WMIS, ESRI, ArcGIS, Git, and high-level proficiency in Microsoft Excel, Word, and Powerpoint
- Programming Languages: Visual Basic/VBA, Python, MATLAB, HTML, CSS, Javascript, and SQL
- Languages: English (Native Proficiency), Hindi (Intermediate)
- Certifications: Advanced Google Analytics; GTI Pipeline Safety Regulatory Compliance Course