# **Dhruv Aggarwal**

451 N Grant St. Apt # 10 West Lafayette, IN 47906 • (732) 593-7986 • aggarw45@purdue.edu • dhruvaggarwal98.github.io

**OBJECTIVE:** To gain industry experience through an internship in the field of data analytics and software development

#### **EDUCATION:**

- Purdue University, West Lafayette, IN
- Bachelor of Science in Computer Engineering

#### **TECHNICAL SKILLS:**

- Software: Python, R, Matlab, C, C#, C++, Java, SQL, HTML, XML, CSS, JavaScript, GitHub, MS Excel, MS PowerPoint, MS Visual Studio, X-Plane, Energy 3D
- Hardware: Linear Circuit Analysis, Verilog, OrCAD, CPLD
- Operation Systems: Linux, MacOS, Windows
- Certifications: Microsoft SQL Server (Udemy), Python Programming (Udemy)

### PROFESSIONAL EXPERIENCE:

Flyr Aug 2018- Present

### Co-Founder

- Established the startup to create an intelligent recommendation engine which utilizes a proprietary machine learning algorithm to connect students with organizations
- My long term vision as a co-founder is to create a platform in which we can successfully recommend organizations and events for students with greater than a 90 percent accuracy
- Created a landing page and coded the proprietary algorithm along with being in charge of Project Management, Team Management and Business Development

Valiance Partners Jun 2018 – Aug 2018

## Software Engineering Intern

- Generated XML to C# code generator to serialize/de-serialize the XML file
- Developed user-friendly data grid to display the errors, including the usage of third-party DLL's
- Created an export to Excel functionality that would help business's understand and process the error's found
- Wrote and debugged complex SQL queries for Exporting/Importing data and to implement ETL (Extract, Transform, Load) across multiple databases/ data sources
- Documented procedures and processes for error validation in Microsoft Word and Microsoft PowerPoint

# Machine Learning and Pattern Recognition, Rome (Study Abroad)

May 2018 – Jun 2018

May 2020

- Studied neural networks, support vector machines, decision trees and data mining methods
- Worked on intelligent information processing along with search and retrieval mechanisms
- Wrote and edited algorithms for classification, recognition, prediction, and optimization
- Studied machine learning tools and libraries in R, Python, and Matlab

# **PROJECTS:**

# **Unmanned Aerial Vehicle (UAV): Precision Algorithm for Takeoff and Landing**

Jan 2018 - May 2018

- Developed an autopilot algorithm on MATLAB for takeoff and landing of an UAV
- Identified waypoints and targets for testing the algorithm in complex scenarios
- Simulated and tested the algorithm on X-Plane to assess real time compatibility and avoid overload

# Data Analytics & Data Cleansing: Linear plotting of complex Thermocouple Data

Mar 2017 – May 2017

- Developed a data cleansing algorithm on MATLAB to cleanse two sets of Thermocouple data of 10,000 data points each in MS Excel
- Analyzed linear plots of each thermocouple to compare critical metrics and identify the most efficient thermocouple
- Wrote a technical brief (MS Word) on critical findings and presented (MS PowerPoint) the summary to the participating teams

### SUPPORTING LEADERSHIP EXPERIENCE/ SKILLS:

## Campus Resident Tour Guide, IN

Jan 2018 - Present

Provide tours to university residences guests and prospective students

# Delta Mu Kappa, IN

Aug 2018- Present

• Member of Purdue's premier entrepreneurship fraternity

### Purdue Boiler Gold Rush, Orientation Leader, IN

Apr 2017 - Aug 2017

Helped incoming freshmen transition and adjust to challenges of college life