



# PALASH PANDEY

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## EDUCATION

Anticipated Jun '22

**Drexel University**  
Bachelor of Science – Data Science

Philadelphia, PA USA  
GPA – 3.83

Jun '19 – Aug '19

**Hong Kong University of Science and Technology (HKUST)**  
Study abroad– Innovation, Business Statistics

Philadelphia, PA USA  
A+

## RELEVANT SKILLS

- Programming: OOP in Python and JavaScript, D3.js, HTML, R (shiny), TensorFlow, PySpark, Django, Sympy, Dash R-Shiny
- ML/DL Frameworks: TensorFlow, Keras, spaCy, pandas, Scikit-learn, Numpy, Matplotlib
- Databases: Hadoop Hive, MySQL, SQLites, Clarity (EPIC) MS SQL Server
- Tools: Visio, Qlik sense server, Jira, Google Firebase & Cloud, Microsoft Excel, Jenkins, LaTeX
- Methodology: Agile, Scrum, Test Driven Development, Continuous Integration/ Development
- API: ServiceNow, Jira, Qlik Engine, QRS, Twitter, Google Maps, Places, Fit

## Employment

Sept '19 – March '20

**Thomas Jefferson University Hospital**  
Data Scientist

Philadelphia, PA USA

- CMS AI Challenge
  - Center for Medicare and Medicaid Services' AI competition to predict unplanned inpatient, nursing facility admissions and adverse events
  - Conducted feature engineering with complex insurance claims data using Hadoop
  - Experimented with tree based models and deep learning
  - Selected for the second round of the competition (top 25 out of 600)
- Automated Echocardiogram Interpretation
  - Created a pipeline for automated calculation of ejection fraction from DICOM files of electrocardiograms
  - Modified open source tool to gather image segmentation training data
  - Integrated with Hadoop environment
- Automated Appointment Scheduling and Reminders
  - Front office and nursing staff spent large amount of time reminding patients and scheduling appointments
  - Used Twilio API to automate appointment scheduling and reminders in smaller practices
  - Reduced appointment no-shows by 30% with automated frequent reminders
- Data Warehouse Recommendation System
  - Created a recommendation system for business analysts and researchers to find relevant tables from different environments: Hadoop, SQL server, IBM Netezza, etc.
  - Visualized metadata from 10K+ tables, 100K+ columns
  - Used NLP to gather information from clinical notes and patient satisfaction surveys
  - Created a tool to generate SQL queries for non-technical users
  - Helped researchers identify relevant patient populations by analyzing free text clinical notes

Technologies & Methodologies: Hadoop, NLP, Deep Learning, ImageNet

March '19 – Present

**Drexel University College of Computing and Informatics**  
Data Science Club Group Leader

Philadelphia, PA USA

- Text Processing Working Group
  - Led weekly sessions, introducing Natural Language Processing concepts to group of 30+ students
  - Applied NLP concepts and deployed solutions (<http://tiny.cc/106hjz>)

### Teaching Assistant

- DSCI 511 (Data Acquisition and Pre-Processing) DSCI 521 (Data Analysis and Interpretation) CS570 (Programming Foundations)
  - Organized weekly office hours for 90+ students, helped students with machine learning and programming concepts
  - Created auto grading scripts to grade and check student submissions for plagiarism

Technologies & Methodologies: Python, R, Java, Machine Learning

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Sept '18 – March '19

## **Thomas Jefferson University Hospital** Business Intelligence Developer/Analyst

Philadelphia, PA USA

- Python Workshop
  - SQL/Qlik developers needed to learn Python
  - I along with a senior developer, started a weekly python workshop as part of continuous education program to educate SQL developers on data analytics and visualization through python
  - Nominated for Drexel Coop award
- Service Now Analytics Project
  - Created a Qlik Sense data model based on analysis of the end user workflow for IT service management platform throughout the enterprise
  - Developed a Qlik Sense application with visualizations for different levels of granularity track.
  - Presented application to Jefferson University Executive Team and put application into production system for them to use

Technologies & Methodologies: Qlik, Python, Node.js, EPIC, Jenkins, Qlik APIs, Excel, Agile, Scrum

June '18 – Sept '18

## **Project One Inc.** Backend Engineer

Philadelphia, PA USA

- 'Project One' is a Drexel incubated startup aimed at using machine learning to help college freshmen learn math by identifying their weaknesses and working on their fundamentals
  - Worked in a test-driven development methodology; built algorithms to generate math questions and served them using a RESTAPI
  - Created user and question data models, Assisted with authentication and stripe payment portal set up
- Technologies Used: Django, Node.js, Keras, Scikit-learn, Sympy, Google Cloud

## PROJECTS

April '18 – Sept. '18

## **Drexel University College of Computing and Informatics** STAR Scholar

Philadelphia, PA USA

- Researched gender bias in peer review in scientific publications
- Used NLTK for sentiment analysis and created a model to predict the authors' gender from their names
- Presented at STAR scholars' showcase, research was featured by CCI and appreciated by the university president

Technologies Used: Python, Jupyter Notebooks, Tableau, NLTK, Scikit-learn

Jun '18

## **Comfy- Making the world accessible (Google best UI)** UI designer, Web developer

Philadelphia, PA USA

- Made web application in a span of 24 hours and won "Google-Best User Interface" award at PhillyCodefest out of 850 participants
- Invited to Google HQ in New York for an all-expense paid tour and resume consultation
- Comfy provides people with information regarding accessibility and special needs accommodation so that they can make educated decisions about their travel

Technologies Used: HTML, CSS, JavaScript, JQuery, Firebase, Google Places, Maps APIs

July '16 – Oct. '16

## **SSRG International Journal of Electronics and Communication** Research Author

Indore, MP India

- Conceived and designed a standalone device to transfer data between two USB devices targeted towards eliminating inefficiency
- Collaborated with another researcher to propose the hardware architecture

## ACHIEVEMENTS

- Dean's List – Every Term
- Star Scholar – Summer 2018
- Dean's Scholarship- Drexel University

## EXTRACURRICULAR ACTIVITIES

- Peer mentor College of Computing and Informatics
- Leader Text Analysis Working Group, Drexel University
- Member of Cyberdragons, Drexel University
- Member of Drexel Queer Student Union