PALASH PANDEY

EDUCATION

Anticipated Jun '22 **Drexel University** Philadelphia, PA USA

Bachelor of Science – Data Science GPA – 3.83

Jun '19 – Aug '19 Hong Kong University of Science and Technology (HKUST) Philadelphia, PA USA

Study abroad– Innovation, Business Statistics A+

RELEVANT SKILLS

• <u>Programming:</u> OOP in Python and JavaScript, D3.js, HTML, R (shiny), Tensorflow, PySpark, Django, Sympy, Dash R-Shiny

• ML/DL Frameworks: TenserFlow, Keras, spaCy, pandas, Scikit-learn, Numpy, Matplotlib

• Databases: Hadoop Hive, MySQL, SQLites, Clarity (EPIC) MS SQL Server

Tools: Visio, Olik 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

Philadelphia, PA USA

Data Scientist

• CMS AI Challenge

 Center for Medicare and Medicaid Services' AI competition to predict unplanned inpatient, nursing facility admissions and adverse events

o Conducted feature engineering with complex insurance claims data using Hadoop

Experimented with tree based models and deep learning

O 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

o Modified open source tool to gather image segmentation training data

o 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

o Reduced appointment no-shows with automated frequent reminders

• <u>Data Warehouse Recommendation System</u>

 Created a recommendation system for business analysts and researchers to find relevant tables from different environments: Hadoop, SQL server, IBM Netezza, etc.

o Used NLP to gather information from clinical notes and patient satisfaction surveys

o 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

Philadelphia, PA USA

Data Science Club Group Leader

• Text Processing Working Group

Led weekly sessions, introducing Natural Language Processing concepts to group of 30+ students

o 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

o Created auto grading scripts to grade and check student submissions for plagiarism

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

PALASH PANDEY

Sept '18 – March '19 Thomas Jefferson University Hospital

Philadelphia, PA USA

Business Intelligence Developer/Analyst

- Python Workshop
 - o SQL/Qlik developers needed to learn Python
 - o 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
 - o 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.

Philadelphia, PA USA

Backend Engineer

- 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

Philadelphia, PA USA

STAR Scholar

- 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)

Philadelphia, PA USA

UI designer, Web developer

- 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

Indore, MP India

Research Author

- 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

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