

UPINDERJIT SINGH

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SUMMARY

Student of Master in Computer Science with **three years of experience** working for a finance institute as a **Software Developer**. Currently **Data Analytics and Natural Language Processing Intern** at [Botco.ai](https://botco.ai). Seeking full time opportunity from Summer 2021.

EDUCATION

Master in Computer Science

Arizona State University (ASU), Tempe, AZ

Graduating May 2021

GPA: 4.00/4.00

Relevant Courses: Artificial Intelligence, Statistical Machine Learning, Data Mining, Distributed Database Systems, Data Intensive Systems for Machine Learning

Bachelor of Technology in Electronics and Communications Engineering

Chandigarh Engineering College, India

Graduated June 2016

GPA: 3.67/4.00

TECHNICAL SKILLS

Programming: Python, Java, Perl, Bash, SQL, PL/SQL, Scala, C/C++

Databases: Oracle, Sybase, PostgreSQL, MySQL, MongoDB

Operating Systems: Linux (command-line and vim expertise), Windows

Other: Spark, Hadoop, MapReduce, Hive, JIRA, Autosys, SVN, Git, Microsoft Office

PROFESSIONAL EXPERIENCE (3.5+ years)

Botco.ai, Scottsdale Arizona: Data Analytics and NLP Intern (3 months)

June 2020 – Present

- Researched data models to utilize in the product analytics platform. Support back end development team with coding in **Java, MySQL and MongoDB**. Used commercial software development check-in and procedures and follow sprint schedules.
- Finding Concept/terms in a Natural Language Processing corpus for unmatched user utterances and new documents using NLTK and JATE. [In Progress]

Gemini Solutions (client PIMCO), Gurgaon, India: Software Engineer (3 years)

June 2016 – June 2019

- Developed a generic PIMCO Analytics Risk Calculator framework using **Python, Perl, Sybase and Oracle** which classify securities based on finance sector, followed by modeling the risk measures catering to 300+ different finance models.
- Optimized analytics processes using **Python, Perl and Oracle (PL/SQL)** which **reduced run-time by 80%**.
- **Designed automation tools** using Python, Java and Bash scripting for reporting activities like deployment verification
- Migrated processes from **Solaris to Linux** and **Sybase to Oracle** as a part of technology upgradation.
- **Lead a team** of 4 resources, directly dealt with a client team of 13 members with accountability of requirement gathering, regular updates over audio/video call and timely delivery.

Wipro Technologies, Pune, India: Technical Trainee (4 months)

Jan 2016 – April 2016

- Developed a generic company system to store employee data using Java and MySQL database.
- Created a recruitment application using click and go features of **salesforce.com**

ACADEMIC PROJECTS

PACMAN Project:

- Built an autonomous agent which makes rational decision in fully or partially observable and adversarial settings for PACMAN game. Using Deep Learning, Planning, Heuristic search, Q-learning, Reinforcement Learning. [[Link](#)]

Data Classification Projects:

- **Classified** images and text using feature selection and different methods like Gradient Descent, Stochastic GD, Mini-batch SGD and SoftMax regression to minimize loss function with the help of **TensorFlow**. [[Link](#)]
- Classified MNIST data by implementing Logistic Regression and Deep Neural Network using **TensorFlow**. [[Link](#)]

Distributed Database Systems Project

- Built a Geospatial Data Processing Project using Hadoop, Spark, Postgresql, Python, Scala, MongoDB. [[Link](#)]

Meal Detection in Type-1 Diabetic Patients Project

- Developed a system to better detect meal of a Type-1 diabetic patients using CGM pump and insulin detector reading (which are parts of artificial pancreas). Involving feature selection, PCA and Graph Plot using Matplotlib. [[Link](#)]

EXTRA CURRICULUM

Solution X Hackathon [2019]: Created an application “SmartPay” which is smart selection of owned credit card [[Code Link](#)]

Code and Response Codeathon Presented by IBM [2019]: Created a disaster management system to show areas affected on a website to provide resources for disaster recovery. Involved in website scraping for getting disaster information.