DEEP PATEL

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OBJECTIVE

I am a dedicated learner, creative thinker, and natural problem solver looking to find exciting new discoveries in the field of robotics and artificial intelligence. I wish to gain exposure to industry developments in these fields and became a part of such goals. To grow my mastery in the field and perform meaningful research, I plan to continue my studies as a PhD candidate. I am a devoted worker with strong critical and analytical skills. I am determined to make an impact in whatever I do and driven by a desire to learn and make my own contributions in the field.

EDUCATION

Rutgers University New Brunswick, NJ

BS in Computer Science & Mechanical Engineering | Minor in Mathematics December 2018

3.80/4.00 GPA | Summa Cum Laude, Dean's List (8x), Scarlet Scholarship, Academic Honors Award

Relevant Coursework:

Computer Science: Algorithms, AI, Robotics, Deep Learning, Big Data Mining, Databases, Systems Programming

Math: Graph Theory, Advanced Calculus, Linear Optimization, Probability & Statistics, Stochastic Calculus

Mechanical Engineering: Vehicle Dynamics, Spacecraft Dynamics & Control, CAD, Material Science, Vibrations

EXPERIENCE

IBM Watson *Denver, CO*

DevOps Intern *May - August 2018*

- Designed & implemented a deployment verification test suite for IBM Watson's natural language understanding API using NodeJS and libraries like Mocha and Chai
- Set up DevOps pipeline for continuous integration and deployment
- Decreased time spent making deployments by over 60% by automating the process and implementing rigorous testing of REST API as well as of machine learning model tests
- Side project: Designed program to extract Twitter sentiment, emotion & keywords for specified keywords

Rutgers Mechanical Engineering Department *New Brunswick, NJ*

Research Technician *September 2017 – Present*

- Performing independent research on computer vision for autonomous vehicles
- Performed literature reviews used to devised a plan to build a model autonomous vehicle
- Obtained funding for cameras, LIDAR, radar, ultrasonic sensors and IMU & CAN bus to test on model vehicle

Rutgers School of Engineering *New Brunswick, NJ*

Undergraduate Tutor *January 2016 – Present*

- Schedule & tutor several undergraduate engineering students one-on-one on a weekly basis
- Subjects tutored: MatLab I&II, Analytical Physics IIa&b, Measurements, Elements of Electrical Engineering
- Helped all students achieve grades in the top 10% of their respective classes within a single term of instruction

Port Authority of NY & NJ *New York, NY*

Engineering Summer Intern *June – August 2017*

- Used strong organizational skills for project management support on major capital development projects
- Provided flexible support and strong engineering analysis in inspections, scheduling, and engineering estimates
- Created a software tool for field inspectors to more accurately & efficiently track construction progress

Arcane Reality *Somerset, NJ*

Software Engineering Intern / Co-Op *September 2016 – May 2017*

- Created new opportunity in start-up by designing personalized virtual reality accessories on SolidWorks
- 3D printed & integrated accessories (like bats, syringes, foot sensors) into client-tailored VR experiences
- Used MatLab & C to integrate microsensors
- Interacted with cross-functional teams to create virtual platforms on Unity up to customer specification
- Tripled sales from private event customers by creating this new user-centric approach

EXTRACURRICULAR ACTIVITIES

Capstone Design Project, *Group Leader* *September 2017 – May 2018*

- Goal: design & manufacture a robotics device for baseball training that enforces proper swing form & timing
- Researched benchmark products on market, established design objectives & came up with a creative prototype
- Manufactured product with hand picked parts and integrated laser sensors for advanced feedback & testing
- Created an apparatus for test automation & analyzed test results using automated scripts
- Created a user focused mobile app which syncs with electronics sensors to display advanced metrics

Goldman Sachs Quant Quest Competition, *2nd Place Finalist* *April – May 2016*

- Devised a machine learning scripts that generate links between S&P 500 companies using Wikipedia data
- Implemented natural language processing method called Latent Semantic Indexing (LSI) using Python to parse Wikipedia pages and produce a statistical model used to generate a large correlation matrix between companies
- Gave a presentation of conclusions & unique business analytics to senior Goldman Sachs quantitative analysts & won 2nd place among universities like Princeton, MIT, NYU, and UPenn
- Python Modules used: NumPy, SciPy, Scikit-Learn, Pandas, NLTK, gensim

TECHNICAL SKILLS AND INTERESTS

Programming: Java (4), C/C++ (4), Python (5), MatLab (5), MySQL (4), R (3), HTML5/CSS (3), JSP (4), JavaScript (4), NodeJS (4), Mocha (5)
Big Data / Machine Learning: Tensorflow (3), NumPy (4), AWS ML (3), Hadoop (3), Spark (4)
Other: ROS (4), Gazebo (4), Linux (4), Git (5), SolidWorks (5), AutoCAD (3), LabView (4), Unity (4), LaTeX (4)
MS Office: Word (5), PowerPoint (5), Excel (5)
Scale: 1-5 = beginner to advanced
Hobbies/Interests: Basketball, Machine Learning/AI, Research, Autonomous Vehicles, Robotics, Aircrafts/Spacecraft