Vineet Vinayak Pasupulety

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EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY | MS in Computational Science & Engineering
Specialization: Computer Vision, Deep Learning, Natural Language Processing
August 2017 - Expected May 2019 | College of Computing, Atlanta, GA | CGPA: 3.75/4.00

NATIONAL INSTITUTE OF TECHNOLOGY | BTech in Electronics & Communication Engineering
July 2013 - May 2017 | Trichy, India | CGPA: 8.9/10.0 (Distinction with First Class)

SKILLS

PROGRAMMING/SCRIPTING LANGUAGES
Proficient: C++ • Python • SQLite • MATLAB • HTML/CSS • JavaScript • Shell • LaTeX
Familiar: R • Java • Mathematica • PHP • GAMS

FRAMEWORKS/LIBRARIES/TECHNOLOGIES
Proficient: Keras • TensorFlow • NLTK • OpenCV • Scikit-Learn • Numpy • D3 • PyTorch • Flask • AJAX
Familiar: Hadoop • Pig • Spark • Azure • AWS • Git • Gephi

EXPERIENCE

ADOBE | Research Intern
May - August 2017 | Bangalore, India

- Designed deep learning models to capture complex edits Photoshopped onto natural images; trained them on exhaustively curated datasets of 9000 images, 1300 Photoshop tools and 178 tutorials
- Performed Dependency Parsing/Vector Space Analysis/Topic Modelling to map Photoshop tool-effect-region tuples into meaningful tutorial steps for novices; Full Training achieved in 15 hours
- Developed with **TensorFlow/NLTK/OpenCV and D3** for plugin for Photoshop CS6. Conference Paper Submitted.
- Awarded the **"Most Creative Research Project"** for 2017 amongst 23 teams at the Big Data Experience Labs

RESEARCH

DATA ANALYTICS & SIMULATION LAB | Graduate Student Researcher
May 2017 – Present | Atlanta, GA

- Working with **Dr. Hongyuan Zha** on generating visual questions by knowledge guided assistance for deep reasoning

PATTERN RECOGNITION & COMPUTATIONAL INTELLIGENCE LAB | Undergraduate Researcher
Jan 2017 – May 2017 | Trichy, India

- Developed sentiment mining algorithms to rate 142.8 million online product reviews on basis of polarity & subjectivity/objectivity; achieved 72% accuracy compared to GroundTruth ratings
- Concisely visualized classified reviews; achieved cache oblivious improvement of 27 minutes
- Developed with **Numpy/Matplotlib/NLTK/Django and D3** for my Bachelors Thesis under **Dr. ES Gopi**

PROJECTS

CAPTIONING-VQA | Code | Video

- Worked with **Dr.Devi Parikh** and developed in **PyTorch**
- Created word, image embeddings from pre-trained Image Captioning models to act as context attention for a deep neural Visual Question Answering encoder-decoder framework

INTERPOLO | Code | Poster

- Worked with **Dr.Polo Chau** and developed in **Flask, AJAX, D3.JS and HTML/CSS**
- Interactive Visualisations and Analytics on-demand of worldwide Terrorism between 1970-2016

TRASHMAFIA | Code | Pitch Deck

- Developed in **Node.JS, Jade, MongoDB, C++ and HTML/CSS**
- Judged the **Best Student Idea Award** out of 368 entries at **Ventura 2016** by VCs from Sequoia Capital
- An app to connect trash collectors and disposers through a sustainable Waste Recycling Supply Chain

QUIKSIGN | Code| Poster

- Developed in **Laravel PHP, MySQL and HTML/CSS**; Finalist at the **Sangam Exhibition, Pragyan 2017**
- Custom E-Signature site for secure, efficient and timely document attestation in "redtape" institutions

CHESSICA | Code| Report

- Developed in **C++**. Resulted in appointment as 1st year Undergrad TA for CS101 practicals at NITT
- Reinforcement learning Chess AI for single & 2 player games; 72% win-ratio for human vs AI games