Onkar Pandit

PhD in Computer Science

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Summary

Passionate NLP and ML researcher with scientific publications at top conferences. Deep understanding of NLP, ML concepts with proficiency in implementing solutions with Python and frameworks like tensorflow, keras, scikit-learn, and nltk. Have rich software development exposure of ∼4 years at reputed firm. Excellent verbal and written communicator in English.

Education

University of Lille
PhD in Computer Science

Dec. '17 – Sept. '21
Lille, France

> Dissertation: Integrating Contextual and Commonsense Information for Automatic Discourse Understanding: Contributions to Temporal Relation Classification and Bridging Anaphora Resolution.

> Advisors: Pascal Denis, Liva Ralaivola, and March Tommasi

> The research was focused on improving representations of linguistic objects by using both knowledge graph based embeddings as well as text-based embeddings.

Indian Institute of Technology (IIT), Kanpur
M.Tech in Electrical Engineering

Jul. '10 – Jul. '12
Kanpur, India

> Specialization: Signal processing and Communication networks

> Thesis: Effect Of Cyclic Frequency Estimation Error and Timing Mismatch On Cyclostationary Detection Of Frequency Hopping Signal.

> GPA: 7/10

Shri Gurugobind Singhji Institute of Engineering and Technology
B.Tech in Electronics and Telecommunications Engineering

Jul. '06 – May '10
Nanded, India

> Courses: Calculus, Multivariable Calculus, Control Systems.

> GPA: 8.37/10

Experience

Indian Statistical Institute, Kolkata
Project Scientist

Jul. '16 – Nov. '17
Kolkata, India

> Jointly designed and developed a CNN based neural architecture for *close-domain* multiple choice question-answering (QA).

> Proposed approach produced competent results over standard QA dataset (published in ACL'18).

> Developed neural network based architecture for lemmatization of words which achieved new state-of-the-art results over many languages: Catalan, Dutch, Hindi, Hungarian, Italian, Latin, Romanian and Spanish (published in ACL'17).

> Proposed SVM based model to predict difficult words in a document from a readers' eye gaze data (published in ICDAR'17).

Oracle India Pvt. Ltd. *Bangalore, India*
Senior Member Technical Staff Mar. '16 – Jun. '16
Member Technical Staff Jul. '12 – Feb. '16
> Contributed to the product development process of Oracle Big Data Preparation Cloud Service (BDP).
> Worked as a part of infrastructure provisioning team.
> Developed various tools to enhance the productivity of team.
> Worked on the development of Oracle WebCenter Portal product, specifically, Portal Security, Notifications, Notes, and Relations. Also, improved test automation framework to catch defects effectively.

Publications

> Probing for Bridging Inference in Transformer Language Models.
  Onkar Pandit, Yufang Hou.
  North American Chapter of the Association for Computational Linguistics 2021 (NAACL 2021).
> Integrating knowledge graph embeddings to improve mention representation for bridging anaphora resolution.
  Onkar Pandit, Pascal Denis, Liva Ralaivola.
  Workshop on Computational Models of Reference, Anaphora and Coreference, COLING 2020.
> Learning Rich Event Representations and Interactions for Temporal Relation Classification.
  Onkar Pandit, Pascal Denis, Liva Ralaivola.
  European Symposium on Artificial Neural Networks (ESANN-2019).
> CNN for Text-Based Multiple Choice Question Answering.
  Akshay Chaturvedi, **Onkar Pandit**, Utpal Garain.
  Association for Computational Linguistics (ACL-2018).
> Context Sensitive Lemmatization Using Two Successive Bidirectional Gated Recurrent Networks.
  Abhisek Chakrabarty, **Onkar Pandit**, Utpal Garain.
  Association for Computational Linguistics (ACL-2017).
> Identification of Reader Specific Difficult Words by Analyzing Eye Gaze and Document Content.
  Utpal Garain, **Onkar Pandit**, Olivier Augereau, Ayano Okoso, Koichi Kise.
  International Conference on Document Analysis and Recognition (ICDAR-2017).

Awards and Achievements

> Oracle webcenter best employee'16 *Numero Uno* award.
> Part of Oracle webcenter best performing team'16 award.
> Ministry of Human Resource Development, India, postgraduate study fellowship in 2010.
> Secured 310 rank out of 1,00,000+ aspirants in Graduate Aptitude Test in Engineering 2010.

Apart from Work

> **Cycling** Three 500+ kms and numerous 200+kms rides. In Dec. '12, cycled from Pune-Goa (500km), in Dec. '13 Kozhikode–kanyakumari (700km) and in Dec.'14 Bangalore-Sringeri-Mangalore (500km).
> **Trekking** Trekked in Himalayan ranges of India, Nepal and Bhutan, also in Western Ghats in India.
> **Running** Ran numerous 10km runs and 4 Half Marathons.
> **Event Organization** Served as President of Maharashtra Mandal, IIT Kanpur and organized cultural events and public gatherings. Also, organized and taken part in knowledge sharing sessions at Oracle.

Skills

> **Computer Languages** Python, Java (previously worked)
> **Frameworks** Tensorflow, Keras, scikit-learn, and nltk
> **Human Languages** *Native:* Marathi, Hindi, *Proficient:* English, *Beginner:* French, Bengali, Kannada, Telugu.