Kaushik Mani

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AREAS OF INTEREST

Machine Learning • Deep Learning
NLP • Software Engineering

EDUCATION

THE OHIO STATE UNIVERSITY
MS in Computer Science
Expected May 2020 | Columbus, OH
Cum. GPA: 3.73 / 4.0

NIT TRICHY
B.Tech in Electronics and Communication Engineering
May 2015 | Trichy, India
Cum. GPA: 8.52 / 10.0

LINKS

LinkedIn:// **kaushikmani**
Github:// **kaushikmani**

COURSEWORK

Machine Learning
Advanced Artificial Intelligence
Introduction to Data Mining
Computer Vision
Foundations of Programming Languages
Algorithms
Operating Systems

SKILLS

PROGRAMMING
Over 5000 lines:
Java • Python • Shell • Javascript
Over 1000 lines:
MySQL •C • C++ • SAP UI5 • LaTeX
Familiar:
Matlab • HTML • CSS • Neo4j

TOOLS/PACKAGES
Expert:
Pytorch • Keras • Scikit-Learn
SAP HANA • Numpy • Pandas
Matplotlib • Git
Proficient:
Maven • Springboot • Docker
Swagger • gensim
Familiar:
Tensorflow • Kafka • Kubernetes

ACHIEVEMENTS

Speaker, TechEd Conference, SAP
Delegate, Indian Cancer Congress
Outstanding Merit in Maths '09, '11

WORK EXPERIENCE

GRADUATE STUDENT RESEARCHER | Advisor: Dr. Huan Sun | Nov'18 - Present | Columbus, Ohio
- Exploring Deep Learning strategies to automatically generate domain-specific questions for sentences in clinical notes.

SOFTWARE DEVELOPER | SAP | Bangalore, India | Jul'15 - Jul'18
SAP Connected Health Platform (On-Premise):
- Worked on the development of Plugin Framework and Data Integration which act as a framework for integration of healthcare data from external source systems into the clinical data warehouse.
- Developed features like Profile Chaining, Profile Scheduling and UI Integration in Data Integration framework which helped in automating the process of bringing the healthcare data from the external source systems.
- Maintained the production code by writing unit tests and fixing issues during AT phases. Also mentored the interns to get on track with technology stack and standard industry practices.

SAP Health Platform (On-Cloud):
- Developed microservices for ingesting clinical data stored in both structured and unstructured format in an industry standard way for upstream analysis.
- Developed API's for a HL7 message server along with message transformation capabilities to convert the HL7 messages into FHIR form.

GRADUATE TEACHING ASSOCIATE The Ohio State University| Jan'19 – May'19 | Columbus, Ohio
- Instructor for course CSE 1222 – Introduction to Computer Programming in C++ for Engineers and Scientists. Conducted classes, labs and graded the exams, assignments for 80 students.

RESEARCH WORK/PROJECTS

CLINPHRASE: EXTRACTING QUALITY PHRASES FROM CLINICAL DOCUMENTS | Advisor: Dr. Huan Sun | Jan'19 - Jul'19
Designed and proposed a new framework named ClinPhrase to effectively and efficiently extract quality phrases from clinical documents with only a limited amount of training data. This work has been submitted as a paper to Oxford Bioinformatics Journal and is under review. **Github Repo**.

EXPANDING HORIZONS IN KNOWLEDGE GRAPH COMPLETION | Feb'19 - Apr'19
Extended the knowledge graph completion model TransE, by incorporating the natural language aspect of the knowledge graph for KG completion models. **Frameworks:** Pytorch.

NEURAL IMAGE CAPTION GENERATION | Feb'19 - Apr'19
Extended the multimodal neural approach in image captioning with attention network and transfer learning methods.**Github Repo**.

SPEECH ENHANCEMENT USING NEURAL NETWORKS | Oct'19 - Dec'19
Explored various deep learning architectures to create a frontend component for ASR systems that enhances the quality of noisy signal before it can be used for speech recognition. **Github Repo**.

INDIAN CANCER PROJECT | SAP Labs India | May'16 - Dec'16
Built plugins to collect, curate and analyze data for improving cancer treatment in India. The solution is being used by 10 hospitals in India with 1 million records in the system and was presented at multiple conferences.