ST.ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY::CHIRALA

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

LIST OF TOPICS FOR TECHNICAL SEMINARS

ACADEMIC YEAR: 2017-2018

S.NO	TOPIC NAME
	AI & CLOUD & MOBILE TECHNOLOGIES
1	Artificial Intelligent Systems applications in Computers and Communications
2	Mobile cloud computing models, architectures, and platforms
3	Formal methods for mobile cloud system design and analysis
4	Testing methodologies for mobile cloud services and applications
5	Cloud-assisted human-centered applications based on wearable devices
6	Mobile cloud enabled pervasive learning and education
7	Mobile crowd sensing models and associated platforms
8	Mobile cloud resource management, provisioning, and migration
9	Autonomic aspects of combining cloud computing with fog and edge computing
10	Intent-based interfacing for NFV
11	Mobile cloud data centers, storage, and networking technologies
12	Security, reliability and privacy for mobile cloud computing
13	Real time operations and efficient network/service monitoring in SDN/NFV
14	Performance and scalability issues in NFV implementation scenarios SDN switch/router architectures/designs
15	SDN/NFV Network & Service Orchestration and Management
16	Management of federated SDN/NFV infrastructure and frameworks
17	Traffic Engineering and QoS/QoE in SDN/NFV
18	Softwarized platforms for Internet-of-Things (IoT)
19	APIs, protocols and languages for programmable networks and Software-Defined Infrastructure
20	SDN/NFV issues and opportunities for security, trust and privacy
21	RFID technologies
22	Wireless MAC, routing and transport layer protocols
23	Energy-efficient protocol design
24	Cross-layer design and optimization
25	Seamless heterogeneous wireless networks
26	Wireless data offloading
27	Novel cellular network architectures
28	Wireless network coding
29	Big Data Models And Algorithms
30	Big Data Architecture
31	Big Data Management
32	Artificial Intelligence in Health Care
33	Algorithms, Bio-informatics
34	Theoretical Computer Science, Big Data Processing
35	Algorithms development
36	Parallel and distributed computing
37	Advanced manufacturing technology
38	Product life cycle management

39	Optimization technology
40	Bio Informatics/Bio Medical Image Processing, Software tools
41	Networks, Complex Analysis
42	Differential Equations, Graph Theory
43	Robotics and Artificial Intelligence
44	Computer Crime Prevention and Detection
45	Computational Intelligence
46	E-Technology
47	E-Learning
48	E-Government
49	Distributed and Parallel Applications
50	Data Stream Processing in Mobile/Sensor Networks
51	Peer-to-Peer Networks
52	Data Management in Mobile
53	Data Compression
54	Critical Computing and Storage
55	Confidentiality Protection
56	Computer Security
57	Computer Forensics
58	DATA ENVELOPE ANALYSIS
59	Context aware techniques
60	Algorithms for Intelligent Learning
61	Analogical, cognitive, and creative reasoning ,Business Intelligence
62	Case Based Recommender Systems
63	Collective Learning and Tagging
64	Visual Exploration
65	Visual analytics for text mining /exploration
66	Textual case based reasoning
67	Text mining architecture / frameworks
68	Summarization - context sensitive
69	Snippet Generation
70	Social Web Search
71	Sentiment Analysis
72	Knowledge Discovery from Data
73	Self-learning structures / framework
74	Search Anything - Smart Search
75	Reuse of human expertise / experience
76	Learning contextual factors
77	Real-time applications of text mining
78	Query segmentation and structuring
79	Cross / Multi Language content mining
80	Opinion mining from reviews
81	Internet Services and Applications
82	Internet of Things and Smart Cities
83	Fog Computing
84	Green Networking and Smart Grid
85	Human Language Technologies
89	Image Processing and Visualization
90	Real Time Communication Services

91	Grid and Cluster Computing
92	Distributed Systems Architecture and Management
93	Digital Satellite Communications Service
94	Cyber Physical Systems and Internet of Things
95	Distributed and Mobile Middleware
96	5th Generation Networks
97	Bio-inspired Computing in Communications
98	Wireless, Cellular and Mobile Communications
99	Mobile Cloud and Mobile Cloud Networking
100	Dynamic spectrum access wireless networks
101	Self-protection techniques of computing systems, networks and applications
102	Stochastic analysis and prediction of autonomic systems and applications
103	Benchmarks and tools to evaluate and compare different architectures to implement autonomic cloud systems
104	High performance autonomic applications
	DATA MINING & KNOWLEDGE ENGINEERING
105	similarity measures and learning of similarity
106	statistical learning and neural net based learning
107	video mining
108	visualization and data mining
109	Applications of Clustering
110	Aspects of Data Mining
111	Applications in Medicine
112	Automatic Semantic Annotation of Media Content
113	Bayesian Models and Methods
114	Case-Based Reasoning and Associative Memory
115	Classification and Model Estimation
116	Content-Based Image Retrieval
117	Decision Trees
118	Deviation and Novelty Detection
119	Feature Grouping, Discretization, Selection and Transformation
120	inductive learning including decision tree and rule induction learning
121	knowledge extraction from text, video, signals and images
122	mining gene data bases and biological data bases
123	mining images, temporal-spatial data, images from remote sensing
124	mining structural representations such as log files, text documents and HTML documents
125	mining text documents
126	organizational learning and evolutional learning
127	Statistical Machine Learning
128	Intelligent and fuzzy control
129	Pattern Recognition
130	Ensemble method
131	Evolutionary computation
132	Fuzzy and rough set
133	Data and web mining
134	Intelligent Business Computing
135	Web intelligence and technology
136	Semantics and ontology engineering

137	Social Networks and Ubiquitous Intelligence
138	Multicriteria decision making
139	Soft Computing
140	Intelligent Systems
141	Speech, Image and Video Processing
142	Wavelet Approximation Theory
143	Spline Theory
144	Time-Frequency Analysis
145	Wavelet and Statistics
146	Wavelet and Differential and Integral Equations
147	Wavelet and Numerical and Functional Analysis
148	Wavelet Neural Network
149	Hardware and Software Implementation of Wavelet Transforms
150	Pattern Recognition and Its Applications
	CLOUD COMPUTING
151	Authentication, trust, privacy and other Cyber security issues
152	Parallel and distributed algorithms, resource allocation, load-balance, and management
153	Cloud computing, mobile cloud, mobility-aware cloud data/streams
154	SOA, web services, and mobile services (software, infrastructure, platform as a service)
155	Web services and internet computing
156	Web-caching, content delivery systems and data distribution systems
157	Distributed systems and applications, modeling language, and software engineering
158	Pervasive/ubiquitous computing and intelligence
	MOBILE COMPUTING
159	Future generation communications for 5G or 4G beyond (WiMAX, LTE)
160	Peer-to-peer network computing and overlaying networks
161	Directional antenna and networking
162	FDMA/OFDMA modulations, synchronization, and power optimization
163	Mobile IP and Internet technology
164	Key, attacking models, privacy, confidentiality & security in mobile wireless networks
165	Communication, services, middleware, and multimedia on wireless networks
166	QoS, reliability, performance, and communication theory
167	Human factors of Privacy and Privacy Enhancing Technologies
168	Human vulnerabilities in network and system security
169	Leveraging behavioral science for cyber security risk mitigation
170	Password less authentication methods
171	Patterns of security, privacy and trust practices in human-computer interactions
172	Research methods for user-centric studies in Mobile security
173	Risk and uncertainty management approaches
	CYBER SECURITY & ITS APPLICATIONS
174	Ambient, non-intrusive security, privacy and trust mechanisms
175	Balancing user friendliness and strong security
176	Computer ethics and security
177	Cyber insurance and actuarial services
178	Cyber security awareness raising, education and training programs

179	Cyber security policies and user behavior
180	Economics of cyber security
181	Effects of security systems upon user, corporate, and governmental behavior
182	End-user interactions with trusted platforms
183	Formulation and impacts of national cyber security strategies, policies and standards
184	Game-theoretic approaches to cyber security
185	Social networks and influence analysis
186	Surveillance in cyberspace
187	Usable security and privacy
188	User acceptance of security policies and technologies
189	User psychology and social influence in security and privacy decisions
190	User security and privacy by design
191	Security and Privacy in Cloud and Pervasive Computing
192	Security and Trust in Pervasive Information Systems
	SOFTWARE TESTING
193	Security Architecture and Design Analysis
194	Security Awareness and Education
195	Security Frameworks, Architectures and Protocols
196	Security Testing
197	Software Security Assurance
198	Threat Awareness
199	Vulnerability Analysis and Countermeasures
200	Software security and trust; data privacy
	BIG DATA ANALYTICS
201	Data Quality, Migration, Integration, Synchronization
202	Data Visualization & Statistical Evaluation
203	Data-Driven Enterprise Applications
204	Disaster Recovery & Data Loss Prevention
205	Generating New Revenue Streams / Maximizing Profit Margins
206	Governance and Regulation
207	Hadoop, Map R for complex workloads
208	Harnessing insights from unstructured data
209	Implementing Big Data Architectures (strategy, challenges, opportunities)
210	Improved Business Decision-Making
211	Improved Operational Performance
212	Marketing Analytics
213	Performance Monitoring (in real-time)
214	Predictive Analytics & Forecasting
215	Security Analytics (combatting fraud, insider attacks and APTs)
216	Web Intelligence / Social Media Analytics

217	Business Intelligence and Analytics
218	Data Compression, Discovery, Management, Warehousing
	AI Horizontal Applications
219	Improving the Customer Experience
220	Improving the operational Effectiveness
221	AI for risk management & fraud
222	AI for Sale force and Effectiveness
223	Current limitations of AI and Deep learning
224	Deep learning for Image recognition
225	Deep learning for Natural Language processing and understanding
226	AI Improved for current analytic for Structured Data
	AI Meet other Exponential Technologies
227	AI And IOT
228	AI at Scale on the Cloud
229	AI and Genomics
230	AI and Robotics
231	AI in Autonomous Driving
232	AI for virtual and Augmented Reality
	NATURAL LANGUAGE PROCESSING(NLP)
233	Computational Psycholinguistics
234	Linguistic Theories and Resources
235	Spoken Language Processing
236	Sentiment Analysis and Opinion Mining
237	Multilinguality and Cross-linguality
238	Web, Social Media and Computational Social Science
239	Dialogue and Interactive Systems
240	Information Retrieval and Question Answering
241	Language and Vision
242	Information Extraction
243	Machine Translation
244	Segmentation, Tagging, and Parsing
245	Phonology
246	Machine Translation/Statistical Machine Translation
247	Computational or Quantitative Psycholinguistics
248	NLP-based Recommendation Systems

249	NLP for Digital Humanities
250	NLP for Educational Purposes
	MACHINE LEARNING
251	Active learning
252	Bayesian machine learning
253	Deep learning, latent variable models
254	Dimensionality reduction
255	Feature selection
256	Graphical models
257	Learning for big data
258	Learning in graphs
259	Multiple instance learning
260	Multi-objective learning
261	Multi-task learning
262	Semi-supervised learning
263	Sparse learning
264	Structured output learning
265	Supervised learning
266	Online learning
267	Transfer learning
268	Unsupervised learning
	Machine Analysis of learning systems
269	Computational learning theory
270	Experimental evaluation
271	Knowledge refinement
272	Reproducible research
273	Statistical learning theory
274	Learning in knowledge-intensive systems
275	Knowledge refinement and theory revision
276	Multi-strategy learning
	Machine Learning Application with Multi Domains
277	Collaborative filtering
278	Biomedical information
279	Bioinformatics
280	Healthcare
281	Natural language processing
282	Information retrieval
283	Human activity recognition
284	Computer vision
285	Social networks
	SOFTWARE ENGINEERING
286	Agile software development
287	Autonomic and (self-)adaptive systems
288	Component-based software engineering
289	Crowd sourced software engineering
290	Debugging, fault localization, and repair
291	Requirements engineering
292	Configuration management and deployment

293	Mining software engineering repositories
294	Search-based software engineering
295	Software economics and metrics
296	Software product lines
297	Specification and modeling languages
298	Ubiquitous/pervasive software systems
299	Model-driven engineering
	DATA ENGINEERING
300	Data Provenance, Workflows, Scientific Data Management
301	Data Models, Semantics, Query languages
302	Data Stream Systems and Sensor Networks
303	Data Visualization and Interactive Data Exploration
304	Database Privacy, Security, and Trust
305	Data Mining and Knowledge Discovery
306	Data Integration, Metadata Management, and Interoperability
307	Cloud Computing and Database-as-a-Service
308	Benchmarking, Performance Modelling, and Tuning
309	Big Data, Data-Warehousing System Architectures
310	AI interaction with DB technology
311	Crowdsourcing
312	Uncertain, Probabilistic and Approximate Databases
313	Temporal, Spatial, Mobile and Multimedia Data
314	Strings, Texts, and Keyword Search
315	Scalable Analytics, Graph, RDF, Web Data and Social Networks
316	Query Processing, Indexing, and Optimization
317	Modern Hardware and In-Memory Database Systems
318	Information Extraction, Data Cleaning Curation
319	High Performance Transaction Management
320	Distributed, Parallel and P2P Data Management

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