List of Research Papers studies during the course:

- **Strategies for web application development methodologies**
  @INPROCEEDINGS{7813710,
  author={S. R. Kumar and R. Sharma and K. Gupta},
  booktitle={2016 International Conference on Computing, Communication and Automation (ICCCA)},
  title={Strategies for web application development methodologies},
  year={2016},
  volume={},
  number={},
  pages={160-165},
  keywords={Internet;Unified Modeling Language;object-oriented methods;software prototyping;UML;Web application development methodologies;agile Web development;extreme programming;software applications;Computer architecture;Object oriented modeling;Programming;Servers;Software;Unified modeling language;XML;AWDWF (Agile Web Development with Web Framework);CORBA (Common Object Request Broker Architecture);WCML (Web Mark Up Language);XP (Extreme Programming)},
  doi={10.1109/CCAA.2016.7813710},
  ISSN={},
  month={April},}

- **Integrating user-centered design practices into agile Web development: A case study**
  @INPROCEEDINGS{7785424,
  author={P. Sfetsos and L. Angelis and I. Stamelos and P. Raptis},
  booktitle={2016 7th International Conference on Information, Intelligence, Systems Applications (IISA)},
  title={Integrating user-centered design practices into agile Web development: A case study},
  year={2016},
  volume={},
  number={},
  pages={1-6},
  keywords={Internet;software prototyping;statistical analysis;user centred design;UCD;agile Web development;defect quality analysis;hybrid process framework;statistical analysis;user-centered design practices;Companies;Informatics;Prototypes;Testing;Usability;User centered design;Agile;Agile Web development;Defect Classes;Quality;SCRUM;TDD;UI;UX practices;Usability testing;User-Centered Design},
  doi={10.1109/IISA.2016.7785424},
  ISSN={},
  month={July},}

- **The communication system between web application host computers and embedded systems based on Node.JS**
  @INPROCEEDINGS{8302325,
  author={D. Zhang and S. Lin and Y. Fu and S. Huang},
  booktitle={2017 10th International Congress on Image and Signal Processing, BioMedical Engineering and Informatics (CISP-BMEI)},
  title={The communication system between web application host computers and embedded systems based on Node.JS},
  year={2017},
  volume={},
  number={},

pages={1-5},
keywords={Internet;embedded systems;file servers;hypermedia;transport protocols;Express frame work;HTTP webserver;MongoDB database;Node.JS platform;PC program;TCP-UDP socket program;communication system;embedded system;hyper-text transfer protocol webserver;transmission control protocol;user datagram protocol;web application host computers;Computers;Databases;Embedded systems;Protocols;Uniform resource locators;Web servers;Embedded System;HTTP;Node. JS;TCP;UDP;Web server},
doi={10.1109/CISP-BMEI.2017.8302325},
ISSN={},
month={Oct},}

- **Dependency-Based Attacks on Node.js**
  @INPROCEEDINGS{7839792,
  author={B. Pfretzschner and L. b. Othmane},
  booktitle={2016 IEEE Cybersecurity Development (SecDev)},
  title={Dependency-Based Attacks on Node.js},
  year={2016},
  volume={},
  number={},
  pages={66-66},
  keywords={Java;security of data;Node.js;confidential data leakage;dependency-based attacks;service behavior change;service interruption;third-party libraries;Computer languages;Computer security;Interrupters;Libraries;Loading;Syntactics},
  doi={10.1109/SecDev.2016.023},
  ISSN={},
  month={Nov},}

- **Performance Comparison and Evaluation of Web Development Technologies in PHP, Python, and Node.js**
  @INPROCEEDINGS{7023652,
  author={K. Lei and Y. Ma and Z. Tan},
  booktitle={2014 IEEE 17th International Conference on Computational Science and Engineering},
  title={Performance Comparison and Evaluation of Web Development Technologies in PHP, Python, and Node.js},
  year={2014},
  volume={},
  number={},
  pages={661-668},
  keywords={Internet;object-oriented methods;Node.js;PHP;Python-Web;Web development technology;data-intensive Web application;Benchmark testing;Concurrent computing;Educational institutions;Java;Web servers;Benchmark Test;Node.js;Performance Evaluation;Scenario Test;Web Development},
  doi={10.1109/CSE.2014.142},
  ISSN={},
  month={Dec},}

- **Using the MEAN stack to implement a RESTful service for an Internet of Things application**
  @INPROCEEDINGS{7389066,
  author={A. J. Poulter and S. J. Johnston and S. J. Cox},
  booktitle={2015 IEEE 2nd World Forum on Internet of Things (WF-IoT)},
  title={Using the MEAN stack to implement a RESTful service for an Internet of Things application},
  year={2015},
  volume={},

number={},
pages={280-285},
keywords={Internet of Things;Web services;application program interfaces;security of data;software tools;Angular.js;Express.js;Internet of Things application;IoT devices;MEAN development stack;MongoDb;Node.js;RESTful Web-service API;pull-communications;secure mechanism;Databases;Hardware;Internet of things;Libraries;Logic gates;Servers;Software;Angular.js;Express.js;Internet of Things;IoT;MEAN;MongoDb;Node.js;REST;web programming},
doi={10.1109/WF-IoT.2015.7389066},
ISSN={},
month={Dec},}

- ## Detecting Inconsistencies in JavaScript MVC Applications
  @INPROCEEDINGS{7194585,
  author={F. S. Ocariza and K. Pattabiraman and A. Mesbah},
  booktitle={2015 IEEE/ACM 37th IEEE International Conference on Software Engineering},
  title={Detecting Inconsistencies in JavaScript MVC Applications},
  year={2015},
  volume={1},
  number={},
  pages={325-335},
  keywords={Internet;Java;program debugging;software fault tolerance;AUREBESH;AngularJS;JavaScript-based Web applications;MVC applications;bugs detection;fault injection;formal consistency model;inconsistencies detection;model-view-controller frameworks;Analytical models;Computer bugs;Data models;Detectors;HTML;Motion pictures;Reliability},
  doi={10.1109/ICSE.2015.52},
  ISSN={0270-5257},
  month={May},}

- ## A Big Data Analysis Method for Online Education
  @INPROCEEDINGS{8089954,
  author={S. Yu and D. Yang and X. Feng},
  booktitle={2017 10th International Conference on Intelligent Computation Technology and Automation (ICICTA)},
  title={A Big Data Analysis Method for Online Education},
  year={2017},
  volume={},
  number={},
  pages={291-294},
  keywords={Big Data;Internet;computer aided instruction;data analysis;Internet technology;big data analysis method;big data technology;educational thinking;individualized development strategy;online education;promoted educational technology;traditional education;Androids;Big Data;C# languages;Data analysis;Data mining;Education;Humanoid robots;Big Data;Data Analysis;Educational Reform;Mongo DB;Online Education},
  doi={10.1109/ICICTA.2017.71},
  ISSN={},
  month={Oct},}

- ## No SQL in Practice: A Write-Heavy Enterprise Application
  @INPROCEEDINGS{7207274,
  author={J. R. Lourenço and V. Abramova and B. Cabral and J. Bernardino and P. Carreiro and M. Vieira},
  booktitle={2015 IEEE International Congress on Big Data},

title={No SQL in Practice: A Write-Heavy Enterprise Application},
year={2015},
volume={},
number={},
pages={584-591},
keywords={Big Data;business data processing;database management systems;Cassandra;Couchbase
server;MS SQL Server;Mongo DB;NoSQL databases;big data;data storage;database performance
evaluation;electrical measurement enterprise system;enterprise software;write-heavy enterprise
application;write-heavy evaluations;Benchmark testing;Big
data;Databases;Scalability;Servers;Throughput;Big
Data;Cassandra;Couchbase;Enterprise;MongoDB;NoSQL;SQL Server;Write-Heavy},
doi={10.1109/BigDataCongress.2015.90},
ISSN={2379-7703},
month={June},}

- **Sparse glider datasets: A case study for NoSQL databases**
  @INPROCEEDINGS{6741198,
  author={M. Lindemuth and C. Lembke},
  booktitle={2013 OCEANS - San Diego},
  title={Sparse glider datasets: A case study for NoSQL databases},
  year={2013},
  volume={},
  number={},
  pages={1-6},
  keywords={autonomous underwater vehicles;control engineering computing;relational databases;sensor
  fusion;College of Marine Science Ocean Technology Group;GDAM system;MongoDB NoSQL database
  engine;NULL values;RDBMS;Slocum G1 glider deployments;Structured Query Languages;University of
  South Florida;data management solutions;dense matrices;glider database alternative with
  Mongo;multisensor platforms;relational database management systems;shore-based servers;sparse glider
  datasets;varying discrete time frequencies;Educational institutions;Indexes;Marine technology;Relational
  databases;Servers},
  doi={10.23919/OCEANS.2013.6741198},
  ISSN={0197-7385},
  month={Sept},}

- **Performance Evaluation for CRUD Operations in Asynchronously
  Replicated Document Oriented Database**
  @INPROCEEDINGS{7168428,
  author={C. O. Truica and F. Radulescu and A. Boicea and I. Bucur},
  booktitle={2015 20th International Conference on Control Systems and Computer Science},
  title={Performance Evaluation for CRUD Operations in Asynchronously Replicated Document Oriented
  Database},
  year={2015},
  volume={},
  number={},
  pages={191-196},
  keywords={database management systems;Big Data;CRUD operations;CouchDB;Couchbase;Mongo
  DB;NoSQL databases;asynchronous replication;asynchronously replicated document oriented
  database;cloud computing;distributed environment;information storage;performance evaluation;Data
  models;Distributed databases;Relational databases;Scalability;Servers;Testing;Asynchronous
  replication;CRUD operations;CouchDB;Couchbase;MongoDB;NoSQL;execution time},
  doi={10.1109/CSCS.2015.32},
  ISSN={2379-0474},
  month={May},}

- **MongoDB vs Oracle -- Database Comparison**
  @INPROCEEDINGS{6354766,
  author={A. Boicea and F. Radulescu and L. I. Agapin},
  booktitle={2012 Third International Conference on Emerging Intelligent Data and Web Technologies},
  title={MongoDB vs Oracle -- Database Comparison},
  year={2012},
  volume={},
  number={},
  pages={330-335},
  keywords={SQL;document handling;query processing;Mongo DB;MongoDB;NoSQL document oriented database management system;Oracle database;SQL database management system;database comparison;Database languages;Engines;Indexes;Relational databases;Syntactics;database;document oriented;function;instruction;nosql},
  doi={10.1109/EIDWT.2012.32},
  ISSN={},
  month={Sept},}

- **Is Node.js a viable option for building modern web applications? A performance evaluation study**
  @Article{Chaniotis2015,
  author="Chaniotis, Ioannis K.
  and Kyriakou, Kyriakos-Ioannis D.
  and Tselikas, Nikolaos D.",
  title="Is Node.js a viable option for building modern web applications? A performance evaluation study",
  journal="Computing",
  year="2015",
  month="Oct",
  day="01",
  volume="97",
  number="10",
  pages="1023--1044",
  issn="1436-5057",
  doi="10.1007/s00607-014-0394-9",
  url="https://doi.org/10.1007/s00607-014-0394-9"
  }

- **Web-application development using the Model/View/Controller design pattern**
  @INPROCEEDINGS{950428,
  author={A. Leff and J. T. Rayfield},
  booktitle={Proceedings Fifth IEEE International Enterprise Distributed Object Computing Conference},
  title={Web-application development using the Model/View/Controller design pattern},
  year={2001},
  volume={},
  number={},

pages={118-127},
keywords={Internet;Java;client-server systems;distributed object management;information resources;address space;client/server architectures;design pattern;flexible web-application partitioning;interactive application;interactive software systems;model/view controller design pattern;partitioning decisions;programming model;Displays;Environmental factors;HTML;Java;Network servers;Security},
doi={10.1109/EDOC.2001.950428},
ISSN={},
month={},}

- **AngularJS Performance: A Survey Study**
  @ARTICLE{7950843,
  author={M. Ramos and M. T. Valente and R. Terra},
  journal={IEEE Software},
  title={AngularJS Performance: A Survey Study},
  year={2018},
  volume={35},
  number={2},
  pages={72-79},
  keywords={Internet;Java;software performance evaluation;AngularJS applications;AngularJS performance;JavaScript framework;custom components;model-view-controller pattern;performance problems;single-page Web apps;Computer applications;Computer architecture;Internet;Mobile handsets;Object recognition;Performance evaluation;Software development management;Software engineering;Software reliability;AngularJS;development experience;software development;software engineering;software performance;web apps},
  doi={10.1109/MS.2017.265100610},
  ISSN={0740-7459},
  month={March},}

- **Node.js: Using JavaScript to Build High-Performance Network Programs**
  @article{article,
  author = {Tilkov, Stefan and Vinoski, Steve},
  year = {2011},
  month = {01},
  pages = {80 - 83},
  title = {Node.js: Using JavaScript to Build High-Performance Network Programs},
  volume = {14},
  booktitle = {Internet Computing, IEEE}
  }

- **A case study of open source software development: the Apache server**
  @INPROCEEDINGS{870417,
  author={A. Mockus and R. T. Fielding and J. Herbsleb},
  booktitle={Proceedings of the 2000 International Conference on Software Engineering. ICSE 2000 the New Millennium},
  title={A case study of open source software development: the Apache server},
  year={2000},
  volume={},
  number={},
  pages={263-272},
  keywords={search engines;software engineering;software process improvement;Apache web server;code ownership;defect density;email archives;open source software development;productivity;Application software;Computer aided software engineering;Computer science;History;Job shop scheduling;Open

source software;Productivity;Programming;System-level design;Web server},
doi={10.1145/337180.337209},
ISSN={0270-5257},
month={June},}

- **Optimizing single low-end LAMP server using NGINX reverse proxy caching**

  @INPROCEEDINGS{8304102,
  author={M. Data and M. Luthfi and W. Yahya},
  booktitle={2017 International Conference on Sustainable Information Engineering and Technology (SIET)},
  title={Optimizing single low-end LAMP server using NGINX reverse proxy caching},
  year={2017},
  volume={},
  number={},
  pages={21-23},
  keywords={Internet;Linux;cache storage;file servers;virtual private networks;CPU;DigitalOcean;NGINX reverse proxy caching;RAM;VPS;Virtual Private Server;concurrent connections;dependency force the startup owner;frequency 2.0 GHz;low-end LAMP server;low-end Linux Apache MySQL PHP server;newly born Indonesian startup;popular web applications;web content;web server;Benchmark testing;Computer architecture;Quality of service;Random access memory;Resource management;Web servers;LAMP;NGINX;Reverse proxy caching;Web server},
  doi={10.1109/SIET.2017.8304102},
  ISSN={},
  month={Nov},}

- **Mobile learning application based on hybrid mobile application technology running on Android smartphone and Blackberry**

  @INPROCEEDINGS{6588081,
  author={D. H. Setiabudi and L. J. Tjahyana and Winsen},
  booktitle={International Conference on ICT for Smart Society},
  title={Mobile learning application based on hybrid mobile application technology running on Android smartphone and Blackberry},
  year={2013},
  volume={},
  number={},
  pages={1-5},
  keywords={Java;computer aided instruction;educational institutions;hypermedia markup languages;mobile computing;smart phones;teaching;Android smartphone;Blackberry;CSS3;HTML5;JavaScript;Lentera e-learning system;Lentera website;Moodle;Petra Charistian University;e-learning;hybrid mobile application technology;iOS;mobile application;mobile e-learning application;teaching-learning process;universities;website version;Browsers;Electronic learning;HTML;Mobile communication;Operating systems;Smart phones;Hybrid Mobile Application;android;blackberry;cross platform;mobile learning;phonegap;smart phone},
  doi={10.1109/ICTSS.2013.6588081},
  ISSN={},
  month={June},}