

Debopriyo Bhattacharya

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Education

Syracuse University - College of Engineering and Computer Science, Syracuse, NY May 2020

Master of Science in Computer Science

Major Courses: Design & Analysis of Algorithms; Software Modelling & Analysis; Machine Learning for Security

Heritage Institute of Technology, India July 2018

Bachelor of Technology in Computer Science and Engineering

Major Courses: Object Oriented Programming; Software Engineering; Data Mining; Web Intelligence & Big Data

Skills

- **Programing Languages**: Python, Java, C#, C++, SQL
- **Operating Systems**: Ubuntu, Windows 7, Windows 10, Android
- **Software**: Visual Studio, VirtualBox, Gliffy, Gephi, Adobe Acrobat DC

Certifications

- Python by University of Michigan on Coursera July 2018
- Java by HP Educational Services July 2015
- Android by HP Educational Services January 2015

Experiences

Remote Package Dependency Analyzer, Syracuse University August 2018 ~ December 2018

- Created a remote code analysis tool with emphasis on analyzing C# code to detect file dependency among project files
- Implements asynchronous message passing communication using Windows Communication Foundation Framework
- GUI interface communicates with backend server to select files and initiate analysis
- Backend server extracts lexical content from selected source code files, analyzing the code's syntax from its lexical content, and building a Type Table holding the dependency results
- Implements Tarjan's algorithm to find strong components based on the dependency analysis
- Writes all the results to text file and sends it to the GUI interface finally for displaying to the user

Network model properties for a real-life news network, Heritage Institute of Technology August 2017 ~ April 2018

- Analyzed data from twitter on a certain hashtag to determine distinct groups actively spreading information
- Constructed a news propagation network based on that twitter data to easily visualize
- Evaluated characteristics of social interaction among network members and formed distinct clusters
- Used python libraries and Gephi for visualizations, removed outlier nodes using different algorithms

Summer Internship, Stevens Institute of Technology, Hoboken, NJ June 2017 ~ July 2017

- Studied Convolutional Neural Networks and its applications in computer vision problems
- Created a prediction model in python using tensorflow library to identify scientific names from images of different species
- Explored multiple optimization techniques to increase training speed and accuracy of prediction
- Trained the model on the cloud using Amazon AWS instance, used different instances to decide which performs best

Research Assistant, HCL Technology June 2016 ~ August 2016

- Assisted with research of manufacturing sectors undergoing digital transformation
- Prepared presentations on Internet of Things (IoT) and Digitalization enabling real-time global exchange of information
- Co-authored whitepaper published by HCL on transforming Sales and Operations Planning Process with IoT

Leadership & Involvement

Rotaract Club of Heritage Institute of Technology, Director/Member September 2014 ~ April 2017

- Taught underprivileged children spoken English, grammar, mathematics and computer skills
- Supervised functioning and efficacy of all projects and events undertaken by the club as the Director for two years

Debate Club of Heritage Institute of Technology, President/Member September 2014 ~ April 2017

- Represented my College in Asian Parliamentary Debates in different Colleges across the state
- Elected Club President, organized Heritage Parliamentary Debate where more than 25 Colleges participated

Students Council of Heritage Institute of Technology April 2015 ~ December 2017

- Nominated as the Departmental Coordinator in 2016 for all interdepartmental sports events
- Helped organize workshops and seminars on topics of Android, Ethical Hacking, IoT, Blockchain
- Served in the Core Team and Sponsor Committee for Cultural and Technical Fests of 2017