Pankaj Sherchan

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pankajsherchan.github.io

Education

BS: Computer Science & Mathematics

GPA: 3.972/4.0

Southeastern Louisiana University

Skills

- Machine Learning: Classification, Regression, Clustering, Feature Engineering, Neural Networks
- Statistical Methods: Regression Models, Hypothesis Testing and Confidence Intervals, Principal Component Analysis and Dimensionality Reduction, Stochastic Modelling
- Software and Programming Languages: Python (scikit-learn, numpy, scipy, pandas), R, SQL, C#, Java, Matlab, Javascript, MS Excel
- Selected Coursework: Stochastic Processes, Stochastic Simulation, Random Matrix Theory, Linear Algebra, Probability and Statistics
- Web: C#, SQL, HTML, CSS
- DBMS/ORM Tools: SQL, Linq, Entity Framework
- Technologies: OOD, TDD, REST, API, TFS.

Courses

- Mathematics: Multivariate Calculus, Discrete Mathematics, Differential Equations, Linear Algebra, Modelling and Simulation, Introduction to Probability and Statistics, Probability Theory, Bayesian Statistics, Regression, Graph Theory.
- Computer Science: Fundamentals of Algorithms, Data Structures, Machine Learning, Design and Implementation of Neural Networks, Theory of Automata, Computer Architecture

Research Experience

Research Assistant Southeastern Louisiana University-Hammond, LA

May 2017 - Nov 2017

Expected Graduation: Spring 2018

- Project: Used stochastic modelling with Markov Chains to estimate student success in changing majors.
- Supervisor: Dr. Lucyna Kabza, Dr. David Gurney
- Duties/Skills: Data processing and analysis (python), Matrix Analysis, Stochastic Process, Markov Chains, Bayes Theorem,
 Regular Markov Chains, Transition Probability Matrix
- Poster Presentation at University of Louisiana at Lafayette, Honors Research Program, Lafayette, LA

Research Assistant Southeastern Louisiana University-Hammond, LA

Oct 2017 - Present

- Project: Study of Fibonacci sequence in changing the coefficients, initial conditions.
- Supervisor: Dr. Kent Neuerburg
- Duties/Skills: Matrix Manipulation(python), Algorithms, Matrix.

Professional Experience

Software Engineer Intern GCR- Covington, LA

Sep 2016 - Present

- Setup n-layer architecture, hangfire configuration for notification system, esri map to add data visualization in map.
- Setup the Client side interaction with Angular JS, project styling with Angular Material and less.
- Exposure to enterprise level SDLC. Attend regular meeting with Team leader, Technical Leader, Business Analyst, Team Members. Prepare software help manual for clients.
- Environment: .Net, Angular JS, Angular Material, T-SQL, JQuery, Hangfire, Escri Maps(ArcGIS), Unit Testing, SSRS

Software Developer Intern Utilistar Process Automation- Baton Rouge, LA

June 2015 - Sep 2016

- Assisted a team consisting of Senior Level Developers in implementing and updating the software. My duties included: composing backend logic, designing/updating views, designing/updating reports (SQL Server Reporting Services), as well as testing the application's functionality.
- Exposure to enterprise level SDLC. Attend regular meeting with Team leader, Technical Leader, Business Analyst, Team Members.
- Environment: .Net, T-SQL, JQuery, Unit Testing, SSRS
- Website Link: https://paystar.co/

Mathematics Tutor Southeastern Louisiana University- Hammond, LA

Aug 2014 – Spring 2015

• Taught multiple Calculus courses and Introduction to Probability and Statistics.

Projects

Song Classifier

• Applied Logistic classification algorithms to classify the songs based on more than 10 features on the datasets provided by Kaggle. Used 80% data as training and 20% as testing, the final accuracy reached was 83%.

Housing Price Analysis

 Applied Linear Regression algorithms to predict the housing price based on more than 15 features on the datasets provided by Kaggle. Used 70% data as training and 30% as testing, the final accuracy reached was 91%.

Brain Activity Classifier

• Classified the single source EEG and NIRS (Hbo & HbR) data streams.

Mobile App

- Designed and implemented Mobile Application using Xamarin.forms (iOS and Android) to manage Inventory.
- Developed using Xamarin.forms (iOS and Android).

Honors and Awards

- Winner, State Programming Contest, Louisiana State University
- Winner, Coding Bee Programming Contest, Department of Computer Science
- Winner, Calculus Jeopardy, **Department of Mathematics**
- Dr. William Curran Memorial Scholarship in Computer Science, Department of Computer Science
- Joyce Travis Endowed Scholarship in Mathematics, Department of Mathematics
- Lou Ballard Endowed Scholarship, Phi Kappa Phi
- David Wolfie Philippe Memorial Scholarship for Leadership, Gamma Beta Phi
- Green S Leadership Award, Division for Student Affairs
- Rotary Youth Leadership Award, International Rotary Club

Leadership

- President, Southeastern Undergraduate Mathematics Society(SUMS)
- Student Vice-President, Phi Kappa Phi
- Senator at Large, Office of Science and Technology, SGA
- Member, Association for Computer Machinery (ACM)
- Member, Gamma Beta Phi
- Member, Phi Mu Epsilon