Pulak Sahoo, Ph.D.

Designation : Associate Professor

Department : Department of Computer Science and Engineering

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RESEARCH INTERESTS

- ✓ Software Engineering and Software Testing
- ✓ Model based Software Testing
- ✓ Applications of Machine Learning
- ✓ Artificial Intelligence
- ✓ Data Mining and Exploration

Academic Qualifications

- ✓ Ph. D. (Computer Science & Engineering), KIIT Deemed to be University, India
- ✓ M. Tech (Computer Science and Engineering), BPUT, India

Teaching Experience/Industrial Experience/Research Experience

- ✓ 14 years of Teaching Experience
- ✓ 13 years of IT Industry experience (HP/USA, Intel/USA, Capgemini, Wipro)

PUBLICATIONS

JOURNAL ARTICLES & CONFERENCE PAPERS

[1]. **Sahoo, P.**, Mohanty, J. R., "Test Effort Estimation in early stages using Use Case and Class Models for Web Applications", International Journal of

Knowledge-Based and Intelligent Engineering Systems, IOS Press, vol. 22, no.3, 2018, pp. 215-229. **(Scopus & SCI indexed)**

[2]. **Sahoo, Pulak**, Mohanty, J.R, "Test Effort Estimation in early stages using Use Case and Class Models for Web Applications", IOS Press, International Journal of Knowledge-Based and Intelligent Engineering Systems, 2018. **(Scopus indexed)**

[3]. **Sahoo, Pulak**, Chaudhury, Pamela, Mohanty, Jnyana Ranjan,"Improving effort estimation of software products by augmenting class point approach with regression analysis", IOS Press, Intelligent Decision Technologies Journal, vol.16, no. 2}, pp 357-367, 2022.

[4]. **Sahoo, Pulak.**, Mohanty, J.R, Sahoo D., "Early System Test Effort Estimation Automation for Object-Oriented Systems", Springer, Information and Decision Sciences, pp 325-333, 2018. **(Scopus indexed)**

[5]. **Sahoo, Pulak**, Mohanty, J.R, "Early Test Effort Prediction using UML Diagrams", Indonesian Journal of Electrical Engineering and Computer Science, vol. 5, no.1, pp. 220-228, 2017 **(Scopus indexed)**

[6]. **Sahoo, Pulak**, Behera, A. K., Pandia, M. K., Dash, C. S. K., Dehuri, S., "On the study of GRBF and polynomial kernel based support vector machine in web logs", 2013 1st International Conference on Emerging Trends and Applications in Computer Science (ICETACS) (IEEE), pp. 1-5, 2013. **(Scopus indexed)**

[7]. **Sahoo, Pulak**, Dash, C. S. K., Saran, A., Dehuri, S., Cho, S. "Design of self-adaptive and equilibrium differential evolution optimized radial basis function neural network classifier for imputed database", Elsevier, Pattern Recognition Letters, vol. 80, pp. 76-83, 2016 **(Scopus indexed)**

[8]. **Sahoo, Pulak**, Dash, C. S. K., Dehuri, S., Cho, S. "An empirical analysis of evolved radial basis function networks and support vector machines with mixture of kernels", World Scientific, International Journal on Artificial Intelligence Tools, vol. 24, no. 4, 2015 **(Scopus indexed)**

[9]. **Pulak Sahoo**, JR Mohanty, "System test effort estimation using class model: a case study", Springer, Smart Intelligent Computing and Applications: Proceedings of the Third International Conference on Smart Computing and Informatics, pp. 239-250, 2020 **(Scopus indexed)**

[10]. **Sahoo, Pulak**, Dash, S. K., Dehuri, S. and Mohanty, J.R., "Complexity Classification of Object-Oriented Projects Based on Class Model Information Using Quasi-Opposition Rao Algorithm-Based Neural Networks", Springer, Biologically Inspired Techniques in Many Criteria Decision Making: Proceedings of BITMDM 2021, pp 141--150, 2022. **(Scopus indexed)**

[11]. **Pulak Sahoo**, Prateek Sahoo, Dayal Kumar Behera, Jacob George, J R Mohanty, "Forecasting Software Effort Estimation from UML Class Models using Predictive Learning", Springer, ICDIS 2024. Germany, 2024 **(Scopus indexed)**

[12]. **Pulak Sahoo**, Prateek Sahoo, Pulak, Behera, D. K. Mohanty, J. R. and Dash, C. S.K., "Effort Estimation of Software products by using UML Sequence models with Regression Analysis", IEEE, OCIT-2022, pp 97-101, 2022 **(Scopus indexed)**

[13]. **Sahoo, Pulak** and Mohanty, Jnyana Ranjan, "Model-based Test Effort Estimator-a Case Study", IEEE, 2021 19th OITS International Conference on Information Technology (OCIT)}, pp 96-99, 2021. **(Scopus indexed)**

[14]. **Pulak Sahoo**, "Improved Classification of Liver Disorder and Blood Transfusion Donor Data Using Mixed Kernel SVM", Biometrics and Bioinformatics, pp. 29-33 , 2013 **(Scopus indexed)**

ANY OTHER

Book Chapter

[1]. **Pulak Sahoo**, D K Behera, S Swetanisha, JR Mohanty, "Software Development Effort Estimation Using UML Activity Models with Regression Analysis", Springer, International Conference on Microelectronics, Electromagnetics and Telecommunication, pp. 243-253, 2023

Patents

[1]. Design patent titled "**ARTIFICIAL INTELLIGENCE BASED BREAST CANCER DETECTION DEVICE**", Design number: 385684-001, Publish date: 24-05-2024