

RAMESWARA SASHI KIRAN CHALLA



THE WATER INSTITUTE
OF THE GULF



Experience Profile

Rameswara Sashi Kiran Challa, Data Scientist, brings more than a decade of experience in data science and machine learning to The Water Institute. His experience and applied research examines applying statistical machine learning algorithms, time series analysis, and forecasting to real-world challenges.

Prior to joining The Water Institute, Challa as the Senior Enterprise Data Scientist-Business Intelligence and Advanced Analytics for Geisinger brought his interests in using data science and machine learning to solve problems to the healthcare industry. Prior to that, Challa was a Bioinformatics Analyst Global Trait Discovery Informatics at DuPont working on gene sequences and developing software to analyze large amounts of data.

Challa received his bachelor's and master's degree in Honors Chemistry from Sri Sathya Sai University, Andhra Pradesh, India, and a master's degree in Cheminformatics from Indiana University, Bloomington, Indiana.

Company Role

Senior Data Scientist

Areas of Expertise

- Programming
- Data Management
- Data Modeling
- Machine Learning
- Big Data Technologies

Education

M.Sc.
Cheminformatics, Indiana
University, 2010
M.Sc.
Honors Chemistry,
Sri Sathya Sai University, 2007
B.Sc.
Honors Chemistry,
Sri Sathya Sai University, 2005

Professional Experience

- | | |
|--|--------------|
| The Water Institute of the Gulf (Louisiana) | 2021-Present |
| • <i>Data Scientist</i> | |
| Geisinger Hospital & Healthcare | 2016-2021 |
| • <i>Senior Enterprise Data Scientist – Business Intelligence and Advanced Analytics</i> | |
| Knight Cancer Research Institute | 2015-2016 |
| • <i>Research Associate – Data Analytics/Management</i> | |
| E.I. DuPont India Pvt. Ltd., DuPont Knowledge Center | 2011-2015 |
| • <i>Bioinformatics Analyst – Global Trait Discovery Informatics</i> | |
| Oregon Clinical and Translational Research Institute | 2010-2011 |
| • <i>Statistical Programmer</i> | |

Selected Projects

SmartPort (Ongoing): This project aims to develop a Lower Mississippi River SmartPort & Resilience Center (SmartPort), to include a shoaling forecast using crowd sourced data and customized Resilience Dashboards for each participating port along the lower Mississippi River. Through the development of a decision support tool to forecast shoaling at port facilities along the Mississippi River, SmartPort will improve port operations and benefit a variety of stakeholders who need to understand how sediment builds up in the Mississippi River.

Selected Publications

1. Challa, S. Wild, D, J. Ding, Y. Zhu, Qian. Semantic Rules on Drug Discovery Data. 4th Annual Asian Semantic Web Conference (ASWC) 2009. Accepted October 2009
2. Zhu, Qian. Challa, S. Purohit, P. Lajiness, M. Wild, D, J. and Ding, Y. "Using Web technologies for integrative drug discovery". Accepted at IEEE/WIC/ACM WI 2010
3. Michael S. Barker, Katrina M. Dlugosch, Louie Dinh¹, R. Sashi Kiran Challa, Nolan C. Kane¹, Matthew G. King, and Loren H. Rieseberg. "EvoPipes.net: Bioinformatics tools for ecological and evolutionary genomics". *Evolutionary Bioinformatics*. Published online Aug 2010.
4. Qian Zhu, Yuyin Sun, Sashi Kiran Challa, Ying Ding, Michael S Lajiness and David J Wild. Semantic inference using chemogenomics data for drug discovery. *BMC Bioinformatics*. Published on 23 June 2011. Flagged as "Highly Accessed"
5. Joel Eriksson, Daniel S. Evans, Carrie M. Nielson, Jian Shen, Priya Srikanth, Marc Hochberg, Shannon McWeeney, Peggy M. Cawthon, Beth Wilmot, Joseph Zmuda, Greg Tranah, Daniel B Mirel, Sashi Challa, Michael Mooney, Andrew Crenshaw, Magnus Karlsson, Dan Mellström, Liesbeth Vandenput, Eric Orwoll, and Claes Ohlsson. Limited Clinical Utility of a Genetic Risk Score for the Prediction of Fracture Risk in Elderly Subjects. *J Bone Mineral Research*. 2015 Jan