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## WORK EXPERIENCE

**Current: CEO and Data Scientist**, SoftMath Consultants, LLC. 4051 Eastside Hwy, Stevensville., Montana.  
[www.softmathconsultants.com](http://www.softmathconsultants.com).

Founder of the SoftMath Consultants, LLC., SoftMath is an advanced analytics and prototype application development consultancy. As a CEO, responsible for strategy development and management. As a data scientist and consultant, I 'm responsible for developing solutions and prototype algorithms for data analytic problems arising in business, academia, and government.

**08/2013 - 07/2015: Operations Research Analyst**, Montana Department of Revenue Property Assessment Division, Helena, Montana.

Developed predictive models to assess the property values for the 2008-15 Montana State property tax cycle. Evaluated and improved assessment methods for the future cycles. Presented these methods in a relevant conference and published the results.

**08/2012-05/2013: Applied Research Scientist (Principal Scientist)**, Terra Echos, Inc., Missoula, Montana.

Developed distributive real-time data algorithms. Developed an application in the area of cyber security, by adapting the naïve Bayes classification algorithm to streaming data.

**08/2008 - 08/2012: Adjunct Faculty**, College of Technology, University of Montana, Missoula, Montana.

Conducted general education mathematics courses and developed curriculum and course materials. Supervised independent studies and mentored students.

**6/2007- 06/2008: Software Audit Consultant**, MHCC: Montana Healthcare Consultants. Missoula, Montana.

Developed a random sampling application to verify the claims accuracy and audited the company's 12 years of medical claims. The company processed Medicare and Medicaid emergency billing reimbursement claims for Montana and Idaho.

**08/2002 -05/2005: Adjunct Research Associate Professor**, Department of Mathematical Sciences,

University of Montana, Missoula, Montana. Developed data analytics algorithms for a research project funded by USDA and taught courses in mathematics and statistics.

**02/2001- 05/2002: Research Associate**, Numerical Terradynamics Simulation Group: NTSG, Department of

Forestry, University of Montana, Missoula, Montana. Designed and developed algorithms for massively large data sets.

## EDUCATION

**Ph.D.** Applied Mathematics and Informatics (Specialization: Discrete Computational Mathematics and Operations Research), Belarusian State University, Minsk, Belarus, 1989-94.

Thesis: *Algorithms to Solve Some Problems of Submodular Function Optimization.*, Advisor: Prof. N.N. Pizaruk., Belorussian State University, Minsk, Belarus. <http://pizaruk.narod.ru/>.

**M.Sc.** Applied Mathematics with emphasis in Operations Research at Sri Padmavathi Mahila University,

Tirupathi, A.P., India.

**B.Sc. & B.Ed.** Mathematics and Physical Sciences, Andhra University, Visakhapatnam, A.P., India.

**Post-doctoral fellowship.** *Macroeconomic Modeling and Financial Mathematics*, European Economic University and Belarussian State University, Minsk, Belarus. 1995-96., Advisor: Prof. M.M. Kovalev, Department of Financial Mathematics, Belarussian State University, Minsk, Belarus.

**Additional advanced level course work:** At the University of Montana, Missoula in Computer Sciences, Mathematics and Statistics, Business Administration, and at SUNY, Albany, New York in Computer Science.

## **PUBLICATIONS and PRESENTATIONS**

Steele, B., Chandler, J., Reddy, S., First quarter 2017(expected). Algorithms for Data Science. *Springer*.

Reddy, S., 2015. Moderator for Property Assessment and Modeling Session of the *81st Annual Conference of IAAO on Assessment Administration*. September 13-16, Indianapolis, Indiana, USA.

Reddy, S., 2015. Residential Property Value Estimation via Linear Mixed Model Methods. *Journal of Property Tax Assessment & Administration*. Volume 12(2).

[http://www.iaao.org/wmc/Resources\\_Content/Pubs/Journal\\_of\\_Property\\_Tax\\_Assessment\\_Administration.aspx](http://www.iaao.org/wmc/Resources_Content/Pubs/Journal_of_Property_Tax_Assessment_Administration.aspx).

Reddy, S., Haralson, R., 2015. Property value estimation via linear mixed model methods, *GIS-CAMA Conference*. March 2-3. Oklahoma City, Oklahoma, USA.

Steele, B.M., Reddy, S.K., Keane, R.E., 2006. A methodology for assessing departure of current plant communities from historical conditions over large landscapes. *Ecological Modeling*, **199**, 53-63.

[http://www.fs.fed.us/rm/pubs\\_other/rmrs\\_2006\\_steele\\_b001.pdf](http://www.fs.fed.us/rm/pubs_other/rmrs_2006_steele_b001.pdf)

Steele, B.M., Reddy, S.K., and Nemani, R.R., 2005. A regression strategy for analyzing environmental data generated by spatio-temporal processes. *Ecological Modeling*, **181**, 93- 108.

[http://ecocast.arc.nasa.gov/pubs/pdfs/2004/Steele\\_Ecomod.pdf](http://ecocast.arc.nasa.gov/pubs/pdfs/2004/Steele_Ecomod.pdf)

Nemani, R., White, T.P, Thornton, P., Nishida, K., Reddy, S., Jenkins, J., and Running, S., 2002. Recent trends in hydrologic balance have enhanced the terrestrial carbon sink in the United States. *Geophysical Research Letters*, **29**(10), 1468, doi:10. 1029/2002GL014867.

<http://geo.arc.nasa.gov/sge/ecocast/publications/pubs/nemani-grl.pdf>

Reddy, S.K., 2001. Analysis of the relationship between sea and land surface climate and carbon budget 1900-2000 for the United States. *Montana Chapter Meeting of the ASA: American Statistical Association*. October 12, Butte, Montana, USA.