

## Research Interests

Predicting the pharmacokinetic properties of drug-like molecules using statistical machine learning methods

## Education

2015-now	Philosophy Doctorate (Ph.D.) Computational Biology	Washington University in St. Louis
2013-now	Medical Doctorate (M.D.)	Washington University in St. Louis
2010-2011	Master of Science (M.S.) Computer Science	University of Tulsa
2009-2010	Graduate Study Computer Science	Duke University
2005-2009	Bachelor of Science (B.S.) Double Major in Mathematics and Computer Science <i>Magna Cum Laude</i>	University of Tulsa

## Publications

**M. K. Matlock.** *Machine Classification Bipolar and Major Depressive Disorder using Structural Features of The Cerebral Cortex.* Master's Thesis. University of Tulsa, 2011.

## Refereed Journal Articles

## Conference Proceedings

### Presentations

2009	Effective tag mechanisms for evolving coordination	AAMAS 2009* Budapest, Hungary
2007	Effective tag mechanisms for evolving cooperation	AAMAS 2007* Honolulu, HI, USA
2006	Evolutionary Programming Solutions of MDPs	University of Tulsa Research Colloquium Tulsa, OK, USA

### Awards and Achievements

2009	James B. Duke Fellowship Recipient	Duke University
2009	Graduate Research Fellowship Honorable Mention	National Science Foundation
2008-2009	President: Mathematical Association of America	University of Tulsa
2005-2009	Presidential Honor Roll	University of Tulsa
2008	Ralph W. Veatch Outstanding Academic Achievement Award	University of Tulsa
2007-2008	Treasurer: Association for Computing Machinery	University of Tulsa
2007	2nd Place, Agent Reputation and Trust Testbed Competition	AAMAS 2007*
2006-2007	President: Association for Computing Machinery	University of Tulsa

### Teaching

2015	Teaching Assistant Molecular Foundations of Medicine	School of Medicine Washington University in Saint Louis
2011	Teaching Assistant Applied Cryptography and Threat Analysis	Continuing Education University of Tulsa
2006-2007	Instructor Principles of Robotics, C Programming for Microprocessors	Summer Robotics Institute University of Tulsa

### Technical Skills

Methods Statistical machine learning methods including neural networks, SVMs and others

Computer Languages: Proficient Python, Java, Javascript, C, C++, PHP, SQL, Bash,  $\text{\LaTeX}$ ,  $\{X\}$ HTML, CSS

Computer Languages: Familiar Erlang, Ruby, Cucumber, C#

Software Tensorflow, Eclipse IDE, GVim, Mathematica, Matlab, Microsoft Office

Operating Systems Linux (Debian/Ubuntu, with knowledge of system administration), Mac OS X, Windows 98/2000/XP/7

### References

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\* International Conference on Autonomous Agents and Multiagent Systems

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Relationship: Principal Investigator

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Laureate Institute for Brain Research

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Relationship: Research grant supervisor

Professor  
Department of Computer Science  
University of Tulsa

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E-mail: [sandip-sen@utulsa.edu](mailto:sandip-sen@utulsa.edu)  
Relationship: Research and academic advisor

Professor  
Department of Computer Science  
University of Tulsa

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