

Sailik Sengupta

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Quick Links

[Website](#)
[Linkedin](#)
[Github](#)
[Google Scholar](#)

Languages

English
Bengali
Hindi

Programming

Java, C++ & Python
Gurobi and Keras
HTML, CSS & JS

Skills

Automated Planning
Network Security
Game Modeling
Deep Learning
Optimization

Research Interests

🔗 Adversarial Machine Learning, Moving Target Defense, Bayesian Stackelberg Games
🔗 Human-Aware AI Assistants, Decision Support Systems, Natural Language Processing

Education

Since 2015 **Ph.D.** student in Computer Science Present GPA: 4.00/4.00
Arizona State University, USA

2009-13 **Bachelors in Engineering** GPA: 8.72/10 (3rd in Class)
Computer Science & Engineering at Jadavpur University, India

Professional Experience

Summer 2018 **Amazon AI - AWS Lex** Research Scientist Intern
Natural Language Processing

Fall 2016 **Arizona State University** Teaching Assistant
Introduction to Artificial Intelligence

Fall 2015 **Arizona State University** Course Instructor
Capstone Project

2013-15 **Amazon** Software Development Engineer
External Payment Systems

Selected Publications

AICS 2019 **Markov Game Modeling of Moving Target Defense for Strategic Detection of Threats in Cloud Networks** [🔗](#)
S. Sengupta*, A. Chowdhary*, D. Huang, S. Kambhampati

Trust 2019 **To Monitor or to Trust: Observing Robot's Behavior based on a Game-Theoretic Model of Trust** [🔗](#)
S. Sengupta*, Z. Zahedi*, S. Kambhampati

ICNC 2019 **Adaptive MTD Security using Markov Game Modeling**
A. Chowdhary, S. Sengupta, A. Alshamrani, A. Sabur, D. Huang

GameSec 2018 **Moving Target Defense for the Placement of Intrusion Detection Systems in the Cloud**
S. Sengupta, A. Chowdhary, D. Huang, S. Kambhampati

AAAI'18 Workshop **MTDeep: Boosting the Security of Deep Neural Nets Against Adversarial Attacks with Moving Target Defense** [🔗](#)
S. Sengupta, T. Chakraborti and S. Kambhampati

- AAAI'18 Workshop **An Investigation of Bounded Misclassification for Operational Security of Deep Neural Networks**
S. Sengupta, A. Dudley, T. Chakraborti and S. Kambhampati
- WeCNLP Summit 2018 **Decomposable Intents in Goal-Directed Conversations: Dataset and Challenges for End-to-End Learning**
S. Sengupta, R. Gangadharaiah, M. Diab
- ICAPS'18 System Demo **MA-RADAR - A Mixed-Reality Interface for Collaborative Decision Making** [↗](#)
S. Sengupta*, T. Chakraborti* and S. Kambhampati
- AAAI'17 Fall Symposium **RADAR -- A Proactive Decision Support System for Human-in-the-Loop Planning** [↗](#) [▶](#)
ICAPS'17 System Demo S. Sengupta, T. Chakraborti, S. Sreedharan, S. G. Vadlamudi and S. Kambhampati
- AAMAS 2017 **A Game Theoretic Approach in Strategy Generation for Moving Target Defense with Switching Costs** [↗](#) [▶](#)
S. Sengupta, S. G. Vadlamudi, S. Kambhampati, M. Taguinod, Z. Zhao, A. Doupe and G. Ahn
- AAMAS DC 2017 **Moving Target Defense- A Symbiotic Framework for Artificial Intelligence and Security** [↗](#)
S. Sengupta
- SoCS 2016 **Compliant Conditions for Polynomial Time Approximation of Operator Counts** [↗](#)
T. Chakraborti, S. Sreedharan, S. Sengupta, T.K. Satish Kumar and S. Kambhampati
- AAMAS 2016 **Moving Target Defense For Web Applications Using Bayesian Stackelberg Games** [↗](#)
Extended Abstract S. G. Vadlamudi, S. Sengupta, S. Kambhampati, M. Taguinod, Z. Zhao, A. Doupe and G. Ahn
- ReTIS 2011 **An improved fuzzy clustering method using modified Fukuyama-Sugeno cluster validity index** [↗](#)
S. Sengupta, S. De, A. Konar and R. Janarthanan

Projects

- 👉 Multi-Agent Path Finding for Semi-autonomous Warehouses - Approximate Algorithms using Min-Weighted-Max-Independent Set. [↗](#) [↗](#)
- 👉 Knowledge Acquisition for Symbiotic Autonomy in Uncertain Environments. [↗](#)
- 👉 Orchestrating Team Meetings with AI-enabled Smart Assistants. [↗](#)
- 👉 Scene Understanding with Deep Neural Networks - Identification of Missing or Occluded Objects in Images. [↗](#) [↗](#)
- 👉 Securing C-code against Size Aware Buffer Overflow Attacks. [↗](#)
- 👉 Secure Java Library for Bcrypt, a Password Hashing Mechanism. [↗](#) [↗](#)

Awards and Recognition

- ★ IBM Ph.D. Fellowship, 2018-19.

- ★ Graduate Research Fellowship, Arizona State University.
- ★ Travel Grants from AAMAS'17, IJCAI'17, GameSec'18, and GPSSA.
- ★ Outstanding performer of the quarter, External Payment Systems, Amazon, 2015.
- ★ NCES Scholar, Indian Association of Physics Teachers, 2008.