

www.linkedin.com/in/romita-biswas

EDUCATION



The Johns Hopkins University | M.S. Electrical Engineering | Focus AI & Controls

Research - Adoption of Solar Powered Microgrids in Washington, DC: Analysis of the Economic Agreements and Energy Management Systems to Adopt Rooftop Photovoltaic Microgrid Systems using Game-Theory and Fuzzy Q-Learning (2023) | Modeling and Control of a connected Photovoltaic Microgrid System: Investigation of Fuzzy Q-Learning Control Methods (2022) | Assessing System Reliability of a Solar Wind Energy System using Stochastic Optimization (2021)

Relevant Coursework: Applied Game Theory | Modeling And Simulation of Complex Systems | Reinforcement Learning | Intelligent Algorithms | Image Engineering | Continuous Controls | Digital Signal Processing



Purdue University | B.S. Electrical Engineering | Minor Mathematics

Research: Deep Reinforcement Learning for Autonomous Inspection System | Investigation of Transverse Seebeck Thermoelectric Generation Effect for Metal Oxides

Relevant Coursework: Big Data Reliability | Optimization for Systems & Control | Feedback Systems | Signals & Systems

EXPERIENCE



Washington, DC

Electrify DC | Member of the Board of Advisors | Technical Advisor

Proposing and designing creative tech driven solutions to accelerate the adoption of solar power and residential electrification in Washington, DC



Arlington, VA

Amazon | PXT | SDET → Software Development Engineer I

Developed major services for Khonsu Workflow Engine Platform | Led, designed, and developed backend and frontend testing framework | Proposed design for ML Powered Workflow Generator



Aptiv | Advanced Driving & Safety | Systems & Software Engineer

May 2020-Dec 2021 Troy, MI Developed Vision Alignment Algorithms to interface with Mobileye Object Detection models | Developed platform to standardize development of vision algorithms across all customer groups



Big Data Big Impact | Purdue University | Founder & President

Aug 2019-June 2020 West Lafayette, IN

Founded Purdue's first data science organization tackling sustainability issues with tech solutions | Founded and hosted the first Data Science Hackathon: "Mitigating Wildfires through techno-economic Solutions" | Founded and led the RecycleSort Project: an ML based optical sorter for community spaces



Lyft | Level5 Self Driving | Software Engineering Intern

May 2019-Aug 2019 Palo Alto, CA Designed and implemented "Model Based Software Process" (ICJET) for Motion Controls Unit Team | Proposed model and strategy to enter school transportation market using Lyft Bikes & Scooters



Purdue Smart Informatix Laboratory | Deep Learning Research Assistant

Trained and tested RNN and CNN models on UAV images capturing structural damage post-disaster | Proposed application of reinforcement learning to train a UAV to fly and track structural damage

• A P T I V •

Aptiv | Advanced Product Development | Electrical Engineering Intern

May 2018-Aug 2018 May 2017-Aug 2017 Kokomo, IN Designed MATLAB GUI and Simulink Model to simulate target detection, radar transmission, and 3D signal processing for use in development and testing of radars for highway lane changes