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*Arkanil Roy*  
*University of North Texas*

- I work in the Cisneros Group in the Department of Chemistry
- **Computational studies of DNA pol  $\gamma$** 
  - Using QMMM techniques to determine the structural and functional dynamics of pol  $\gamma$
  - Studying common SNPs to correlate to various cancer phenotypes
  - Programs used: AMBER, TINKER, LICHEM
- **Gaussian Electrostatic Model (GEM) development**
  - Optimization of the GEM density/multipole
  - Enhance energy calculation by integration into Psi4
  - Language: Fortran

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- Gain insight into machine learning and deep learning to implement into my projects
- Get better at data visualization
- Become more efficient at HPC and write better scripts for the same
- Understand and implement Data Science applications