

Updated on Feb/18/2019

## **Funded Ph.D. Position is Available**

**Ph.D. Position:** I am looking for STRONGLY motivated, creative, and hard-working bioinformatics Ph.D. student to work on a recently funded exciting project, titled, “Gene Regulatory Network Based Biofuel Production Modeling in Algae”.

**Selection Criteria:** Better analytic ability and programming skill will be needed. A student with the publication(s), especially in the bioinformatics area will be given higher preference. Students having an MS degree will be given preference over student having only a BS degree. A student who has completed a machine-learning course(s) will be given higher preference.

**Project Description:** The project aims at developing advanced algorithms for analyzing and optimizing the gene-protein regulatory network (GPRN) based biofuel production modeling in algae. Our developed top performing tools (<http://cs.uno.edu/~tamjid/Software.html>) will be utilized to some extent to model phenotypical interactions.

Algae are found to have good potential for providing biofuel at a higher rate compared to any other plants. The algae have significant roles in global biological carbon sequestration and oxygen production cycle. Algae can be developed as an excellent microbial cell factory that can harvest solar energy and convert atmospheric CO<sub>2</sub> to useful products and thus can establish the missing link in the fuel-cycle.

This project is a collaboration between my lab @ UNO’s computer science department (<http://cs.uno.edu/~tamjid/>) and our industry partner BHO Technology, Louisiana. My lab will develop the theoretical underpinning and software tools and BHO will test, implement and would finally make the algal fuel production commercially viable. The proposed scientific approach-based computation-tools will help simulate towards ensuring survivability of engineered algae through seasonal changes as well as help pick the best kind.

**Stipend:** the stipend will be **\$21,000/year**. Tuition fee will also be provided.

**How to Apply:** Interested student, please email Dr. Hoque [[thoque@uno.edu](mailto:thoque@uno.edu)] your CV showing relevant credentials (publications, degree(s), GPA, programming experiences, analytic abilities, etc.) and mention the project title, “*Gene Regulatory Network Based Biofuel Production Modeling in Algae*” in your email.

**Note:** Even if you emailed me before for a Ph.D. position in general and not for this project, you will have to reapply with your updated CV and the title of this project as described above, if you are interested.