Job Description – Research Internship

Department: Engineering and Computer Science
Reports to: Dr. Nan Cao
http://nancao.org

Position Summary

NYU Shanghai is recruiting several research internship positions for Dr. Nan Cao’s VIS-Lab (http://nancao.org/). The overarching goal of our research program is to develop advanced visualization techniques for dealing with complex data (i.e., big, heterogeneous, multidimensional and dynamic) exploration and analysis. In particular, our work is focused on information visualization and visual analysis. We produce novel visualizations to represent, summarize, interpret, and analysis real world data to visually uncover a variety of data relationships in the domain of social media and healthcare.

Selected candidates will have the opportunities to (1) publish high quality papers in international journals and conferences; (2) receive a reference letter from the advisor to help you apply top ranking universities; (3) receive the NYU scholarship and enroll the PhD program in NYU.

Applicants should be able to work for at least 24 hours (i.e., 3 full days) per week and the minimum length of the internship will be three months.

Responsibilities

- Design and develop algorithms for visualization and visual analysis;
- Design and develop visual analysis systems;
- Help supervisor to publish papers in international conferences and journals;
- Other ad hoc tasks assigned by the supervisor.

Qualifications

Required Education

- Major in computer science or related areas;
- The third or fourth year undergraduate students; Master students must get the advisor’s agreement before the application.

Required Knowledge, Skills, and Abilities

- Have excellent coding skills (be familiar with fundamental algorithm and data structure);
• Have passing knowledge in data science and have strong interests in data visualization;
• Have strong system building capabilities (be familiar with database, Linux, and Spark or Hadoop)
• Priority will be given to the students (ordered by importance):
  1. Who can work for a longer period of time (e.g., 6 months)
  2. Who have experiences in ACM, Top Coder competition, or other coding competitions
  3. Who are familiar with JavaScirpt and frontend development
  4. Who are familiar with algorithms in computer graphics, data mining, or machine learning

Interested candidates should follow the application procedures listed below:

(1) **Prepare the following materials and attach them with an email.**
   a) Latest CV
   b) Informal transcript
   c) Description of previous research or project experiences
   d) Personal statement in which candidates should briefly answer the following questions:
      ● Why do you want to apply for this position?
      ● What is your current study plan?
      ● What are your current research or project interests?
      ● What do you want to learn via this RA experience?
      ● In your mind, what should an advisor do so that he/she can best help your won development?
   e) Any other materials showing your capability (e.g., your award certification, homepage, project description, reference letters, etc.)

(2) **Please answer the following two questions in your email:**
   a) How many days can you work per week? (e.g. 3 full days per week);
   b) How long can you work and when can you start working?

(3) **Send your application email to nan.cao@nyu.edu with the email title as “[NYUSH RA] YOUR NAME”.**

Applications will be reviewed until all the positions are filled. The results will be notified by email and a follow-up phone interview will be scheduled. For more information please visit our website: shanghai.nyu.edu.