

Biocomplexity Faculty Search
c/o Theresa Dawson,
Department of Physics
Indiana University
Swain West 117
727 East 3rd Street
Bloomington, IN 47405-7105
USA

12/21/2004

Dear Members of the Search Committee:

I am writing in support of Junwen's application for a faculty position. I am an assistant professor of bioinformatics in the department of Genetics at the University of Pennsylvania. I also have a secondary position with the department of computer science. One of the broad areas I am interested in is eukaryotic gene transcription (the process of transcribing DNA into mRNA). All computational analysis of transcription requires an accurate knowledge of the transcription start site of the gene. The problem of identifying distinguishing DNA features to accurately predict this site has been notoriously hard and presents an important challenge.

As Junwen's postdoctoral supervisor at the University of Pennsylvania, I am very familiar with his research in the gene regulation area and also with his previous work on protein sequence alignment. I have known him for almost a year during which time Junwen has made significant progress in advancing the field of computational promoter prediction. In a relatively short period of time, overcoming the learning curve, he has developed three novel probabilistic algorithms enhancing various aspects of promoter prediction problem. Although relatively new to the field of bioinformatics, Junwen has taken a lot of initiative in learning new concepts and has been very prolific. His work so far has resulted in enough results for three manuscripts (in preparation).

Before joining my lab Junwen was a postdoctoral researcher in the department of Chemistry at Temple University, where he investigated the effect of amino-acid context on the sequence to its propensity for a particular secondary structure and exploited this dependence to improve on protein sequence alignment methodologies. Looking a broader sequence context to make functional predictions is one of the themes in his work.

At a personal level, Junwen is industrious, down to earth, straight forward and honest. He is always cordial and cooperative. Junwen is highly committed to research in bioinformatics and with his experience and continued commitment to learning, will make a valuable addition to an academic department. Please do not hesitate to contact me if you have additional questions.

Sincerely yours,

Sridhar Hannenhalli, PhD
Assistant Professor
Center for Bioinformatics, Department of Genetics
University of Pennsylvania
Philadelphia, PA 19104
Phone: 215-746-8683
FAX: 215-573-3111
Email: sridharh@pcbi.upenn.edu