

האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

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Rob de Ruyter,
Physics Department,
Indiana University,
Swain Hall West 117,
Bloomington IN, 47405-7105

Dear Rob,

Re: **Dr. Ilya Nemenman.**

I write this letter to recommend Dr. Nemenman for a position at your department with great enthusiasm. I know Ilya very well. We have been working together since he was a graduate student at Princeton and I have come to highly appreciate his research abilities and exceptional analytical skills. Our work together was focused on mainly two issues: Predictive Information as a measure of complexity of temporal process (with William Bialek); and a foundation of network information theory on the basis of the multi-information function. Ilya had several visits to my lab in Jerusalem and I enjoyed the fruitful interaction with him, and his cooperation with many of my graduate students. He certainly has superb mathematical education and excellent taste for problems. He never afraid of tackling new challenges and I have seen him attacking computational and analytic difficulties that much more senior researchers could not handle - with great success. His work already received much attention and he is considered one of the brightest physicists who entered machine learning and neural computation in the last few years.

The only problem I found with Ilya is his difficulty to complete his papers (a problem I share myself – I must admit). He has done much more than is shown on his publication list. I suppose this is partly due to his very high standards and partly due to English proficiency – which I am sure will improve quickly.

I have seen many excellent candidates at this stage, including many of my own students who are already established scientists (like Yoram Singer, Dana Ron, Golan Yonna, Shlomo Dubnov, and others). Ilya is certainly better than most of them at this stage in terms of his theoretical abilities and scientific vision. He lacks on his communication skills and his talks are often too technical to follow (the Russian style...). Despite those minor problems – I

strongly recommend him for an assistant professorship in any computational/mathematical department at the best possible universities.

Please feel free to contact me again if you need further information about Ilya.

Sincerely,

Naftali Tishby

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