

**University at Buffalo**  
*State University of New York*

Department of Computer Science and Engineering

December 20, 2015

Graduate Admissions Committee  
Re: applicant Haoriwa (Horvo)

Dear Graduate Admissions Committee:

I am happy to provide a reference for Mr. Haoriwa. This is his full name in UB records and is of Mongolian extraction; he may add “Horvo” as a legal surname after graduation. I have known him as a student in two courses separated by 18 months: “CSE191 Discrete Mathematics” in his first term at UB and “CSE396: Intro Theory of Computation” last Spring. I am an Associate Professor with long happy service at UB.

Mr. Haoriwa earned an A- in both courses. In CSE191 he had some adjustment issues early on and in the second month I explained my course system and American academics in general in my office hours. He seemed happier with the course material after the five initial weeks on logic (using the words-heavy approach in the long first chapter of the much-used text by Rosen) gave way to numerical topics and combinatorics. I was very gratified to see, however, that he got a near-perfect score on the lengthy logic proof problem on my 3-hour final exam—I rewrote Lewis Carroll’s puzzle 18 (<http://www.math.hawaii.edu/~hile/math100/logice.htm>) about Shakespeare to work in my belief that the Bard made extensive use of materials originating with the Earl of Oxford. That is to say it was an especially demanding question for a non-native speaker but didn’t faze him. He was in the top 10 out of 155.

In CSE396 he was doing A work all term, keeping up with a few powerful native students, until a B on the final exam left him with the A-. The course is heavy on word and proof problems. This time he didn’t ever come in for help, while I spent a lot of office time with some other Southeast Asians. Rather than one midterm I use two prelim exams in class period and they are unapologetic sprints with word problems not just quick-answer; getting A on both is no mean feat. Only four of 129 earned an A in the course; he was tied-2nd among five grades of A-. His self-assurance was more evident, as also this term, but he is still quiet. He has always seemed to understand me perfectly.

I appreciate his stated intent in his essay to bring IT back to his people in *inner* Mongolia. I can vouch that he has the theoretical skills mentioned at the end of it. I’m not the only professor he’s excelled for—if anything the two courses “depressed” his 3.82 GPA. In sum I can recommend him most highly for Master’s study. I will be happy to answer any other questions you may have.

Yours sincerely

Dr. Kenneth W. Regan