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Re: Noah Friedland's leadership of Project Halo

I consider the Project Halo Pilot to have been a remarkable success, and I consider Noah Friedland, as Program Manager, to have been the major reason.

The question that captured Paul Allen's imagination was, roughly, "Is knowledge representation and reasoning ready for prime time?" It was Noah's job to translate this vision into action – to devise a staged research and development effort to answer this question and to advance the state of the art. It was also Noah's job to design and carry out the first stage: 3 competing teams, 70 pages from the AP chemistry syllabus, 4 months to encode the knowledge, 150 novel questions, no natural language processing, detailed failure and brittleness analysis.

I was amazed at the results of the Project Halo Pilot – at what the three teams were able to achieve. But even more than this, I was amazed at the project design – at Noah's part. Every aspect of it seemed just right.

The follow-on Halo2 effort, also managed by Noah, had the same hallmarks. Is it possible for disciplinary experts – scientists and scientific educators, rather than the designers of knowledge representation and reasoning systems – to formulate, debug, extend/revise, validate and query knowledge bases capable of answering a high percentage of novel questions and providing domain-appropriate answer justifications?

Maybe not as sexy as SpaceShipOne, but nonetheless, an extraordinary job of design and execution that will stand as a significant contribution to our field.

Regards,

Edward D. Lazowska
Bill & Melinda Gates Chair