



Honors Research Assistant Program

Title: Evolution of the Personal Navigation Device Industry

Description of the Research: The last ten years have seen the rapid spread of GPS devices. Starting as a fledgling industry, the Portable Navigation Device (PND) sector – which includes GPS, software algorithms and map-making technology – now has participation from more than two hundred firms, with a growth rate of over 300% from 2007 to 2008. The industry is also at the cutting edge of science and technology, with almost 1300 related patent applications pending as of August 2009.

Our project seeks to examine the emergence growth of this industry. We will study the strategy and timing of entry by new firms in the sector and the ensuing competition in the market. We shall also examine the technological advances underlying this competition. Overall, we hope to arrive at a better understanding of how high-technology sectors evolve, as well as develop insights into the future direction of the PND industry.

For students, the project offers an opportunity to learn about a dynamic new sector, while developing insights into the relationship between technology and market competition. In addition, the project will help students develop critical skills in company research, the use of public information sources, data collection and management, and familiarity with patents.

Responsibilities of the Student:

- Documenting and collating industry reports.
- Assistance in developing and maintaining a detailed dataset of firms and products
- Identifying industry players
- Accessing and matching data from various sources (e.g. Lexis-Nexis, Hoovers, USPTO)
- Coding firm actions
- Verifying data accuracy

Approximate Number of Hours/Schedule:

The student may choose the hours that are most convenient for him/her. The work-plan is for one research assistant working during Fall semester for a total of 100 hours.

Qualifications:

- Knowledge or experience with using keyword search.
- Familiarity with database programs, such as Microsoft Excel, since the database will be developed in Microsoft Excel
- Excellent organizational and planning skills.
- Strong analytical and writing