

WEEK 3

- 1. Since much of the computer literature in economics is associated with skill-biased technical change, this week is devoted to exploring what this term means in greater detail.**
- 2. Griliches is one of the earliest pieces to show that in today's economy, capital appears to be complementary with skilled, rather than unskilled, labor.**
- 3. Golden-Katz piece shows when this pattern arose. The pattern, for example, clearly did not hold in the industrial revolution in which machines complemented unskilled labor to displace skilled artisans. Golden and Katz trace the rise to continuous process industries in the early part of the 20'th century. These industries required fewer unskilled handlers and more skilled maintenance workers and mechanics to keep the machinery going, etc.**
- 4. Traditional economics literature measures skill by years of schooling. Use Attewell piece to make students reflect on this definition – does it make sense. In particular, this piece allows introduction of the idea that some tasks that are trivial for humans – walking across a crowded room to select an apple from a bowl of fruit – are extremely hard for computers to program. Conversely, some tasks that are hard for humans – playing very competitive chess – are tasks computers can do well. Can we square this with the idea that computers are supposed to substitute for less educated labor and complement more educated labor?**
- 5. Beamish et. al. paper continues skill discussion by looking at auto mechanics solving various kinds of problems - some by following step by step instructions in a manual (sometimes with a computerized testing device) and other times by the way a car feels or sounds. We ask which of these methods might be programmed? Paper also looks at what a salesman does and talks about the possibility of programming that.**