Job-Centric Plans of Study for CompE: Advice to CompE undergrads (especially important to sophomores and juniors)

June 2019 T. N. Vijaykumar

Three questions

- Q1: Do you want a CompE job at a top IT company?
 - jobs and internships
- OR you may go to grad school in which case do you want to apply to the top CompE programs?
 - I assume your answer is yes to one or both

Three questions

- Q2: What are the key CompE courses needed for either of these goals?
 - OO programming (30862), OS (469), security (404), compilers (468), AI (473), architecture (437), embedded systems (40862), networks (463)
 - Other courses lead up to these but these are what companies/grad schools want
 - All except 437 are software courses but many software job interviews ask about 437 content
 - 437 is a key distinguisher from Purdue Comp. Sci.
 - Be broad within CompE (DON'T specialize and be narrow) and take MOST/ALL of these - which of these is hot changes so be prepared regardless

Three questions

 Q3: When would many, if not most, of you interview for jobs or apply to grad school?

- Fall of Senior year

Key Implication

- You must take MOST of the key courses
 BEFORE the end of Junior year
 - Taking ALL of those courses may be impossible
 - Taking as many of these courses will likely increase your job/grad school prospects
- Some plans of study to achieve this:
 - http://www.ece.purdue.edu/~vijay/undergrad-planof-study.pdf
 - 264, 270, 362, 368 are prereqs for the key courses and should be done in the Sophomore year
 - Better not to miss more than one best not to miss any of 264, 270, 362, 368, 337 in the Sophomore year (yes, Sophomore)