



From CS@VT to...

Social Impact Engineer

Social Impact Engineers put people first. They use code to tackle real problems – from making apps accessible to fighting misinformation to building tools that strengthen communities. If you want your work to matter beyond the screen, this is your lane.

Essential Foundations

Your CS core is the launchpad for impact. These courses help you see not just how computing works, but how it affects the world: (see the CS Roadmap for a full list).

★ **CS 2104 Problem Solving in CS** build the mindset to solve challenges that matter

★ **CS 3114 Data Structures & Algorithms** - efficient, well-structured code that people can rely on

★ **STAT 4705 Probability and Statistics** - understand data, uncertainty, and evidence in decision-making

★ **CS 3604 Professionalism in Computing** - ethics and responsibility at the heart of computing

Your Go-To Electives

▶ **CS 4104 Data & Algorithm Analysis**
efficiency, fairness, and transparency

▶ **CS 3654 Data Analytics & Visualization**
turn data into insights people can act on

▶ **CS 3724 Human-Computer Interaction**
design technology for real human needs

▶ **CS 4014 Algorithms and Society**
computing's intersection with global issues

▶ **BIT 4604 Data Governance, Privacy, & Ethics**
privacy and accountability in data use



Capstone (CS 4094)

Cap it off with a project that's all you. From an accessibility app to a civic dashboard – your project can make tech matter. Projects often cross pathways, but your role can showcase using tech for good.