

Development Engineering

CSEP 590 B

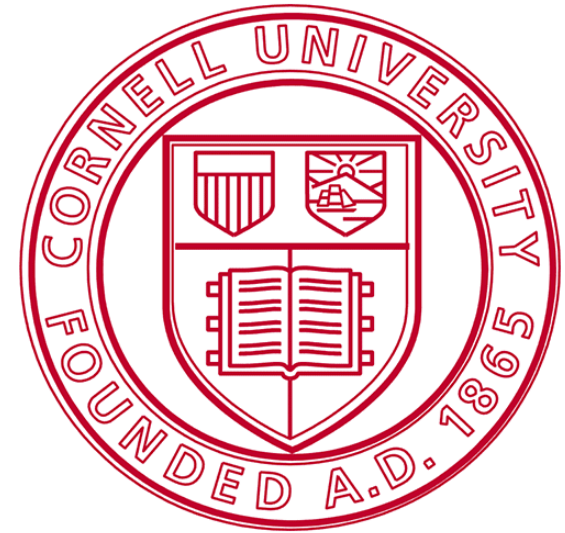
Voice based social networks

Aditya Vashistha & Richard Anderson

May 11, 2020

Today

- Announcements
- Aditya Vashisha, Cornell University
- Discussion with Aditya



Announcements

- Discussion Sections – Zoom – Attend one
 - Wednesday: 3:00-4:00 pm
 - Wednesday: 5:00-6:00 pm
- Homework 6, Due May 18.
 - Review a technology innovation paper by Aditya
 - Submit by email
 - Course grade based on 7 of 9 assignments

Course Schedule

Date	Topic	Lead
April 6	Engineering the Vaccine Cold Chain	
April 13	Community Cellular Networks	Kurtis Heimerl
April 20	Remote Temperature Monitoring	Martin Lukac, Nexleaf
April 27	Election Monitoring	James Long
May 4	Global Goods Software	Skye Gilbert
May 11	Voice Based Social Networks	Aditya Vashistha
May 18	Fintech for Rural Networks	Jenny Aker
May 26	Water Sanitation and Health	Ashok Gadgil
June 1	Open Data Kit	Waylon Brunette
June 8	Development Engineering Discussion	Temina Madon and Anustubh Agnihotri

Development Engineering

Technological interventions to improve human and economic conditions in low-resource settings

Technical aspects of development engineering
Context for development engineering

How is development engineering practiced in different settings and domain

The course so far . . .

1. Vaccine Cold Chain: System wide updates of cold chain status
2. Community Cellular: Last mile delivery of cellular communication
3. Remote Monitoring: Real time, automatic reporting
4. Election Monitoring: Verification of polling data through crowd sourcing
5. Global Goods: Information systems for public health

How do these fit together into an engineering domain:
Development Engineering

Development Engineering

Engineering process

- Application of commercial grade technology
- Common set of constraints: infrastructure, finance, technological capacity
- Iterative development

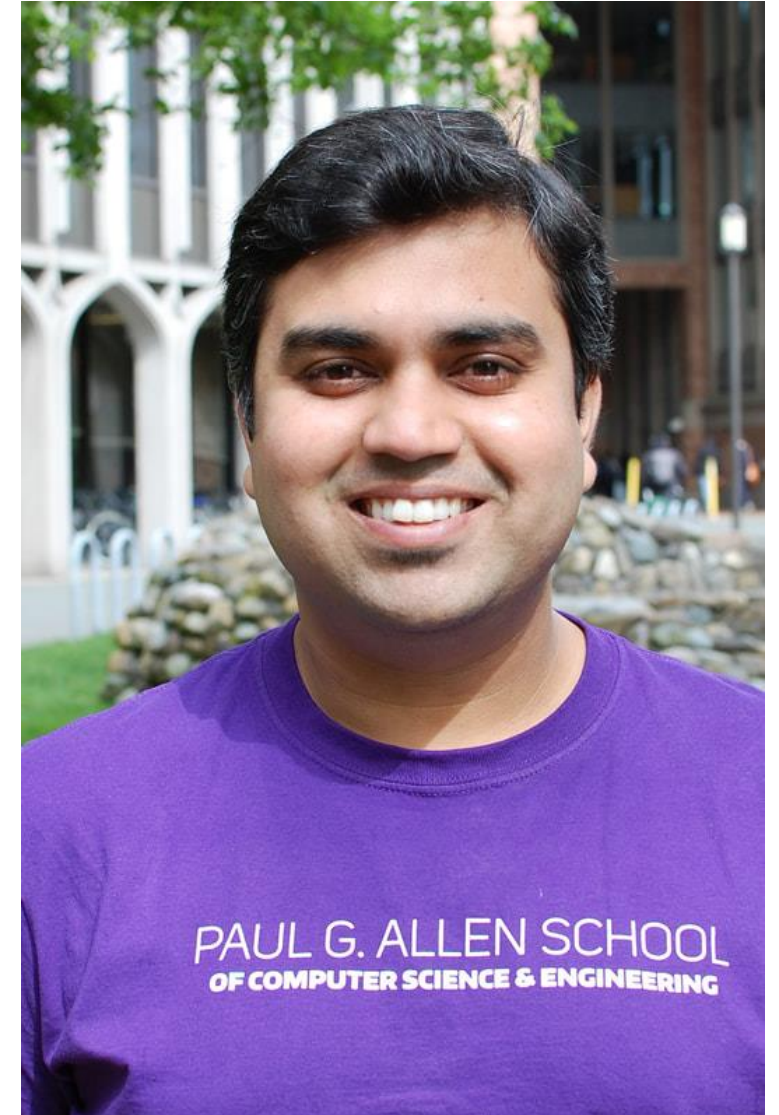
Development Engineering

Deployment context

- Industry structure, governance, and finance have a dominant role in engineering practice
 - Civil Engineering
 - Military Systems
 - Commercial Aviation
 - Medical Systems
 - Software
- Development Engineering
 - Governance and Funding
 - What is the source of innovation
 - What are opportunities for sustainable impact

Today – Voice Based Social Networks

- Aditya Vashistha
 - B. Tech, Jaypee Institute of Information Technology, Noida, India
 - Infosys Labs
 - Microsoft Research India, Technology for Emerging Markets, Assistant Researcher
 - PhD, Computer Science and Engineering, UW
 - Assistant Professor, Cornell University



Over to you Aditya. . .