

# **CS6204**

# **Public Key Infrastructure and Network Security**

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# Hello

- Who am I?
  - Taejoong “Tijay” Chung (feel free to call me Tijay)
  - `tijay@vt.edu` (or `tijay@cs.vt.edu`)
  - Office hours:
    - 3pm — 4:30pm on Mondays and Wednesdays (<https://virginiatech.zoom.us/j/94695115137>)
  - Email me

# Course Outcome

- From the syllabus: *This course examines basic network security models and public key infrastructure that entwines multiple layers of the network stack: application, transport, and network layer.*
- From my perspective: You will learn why there are so many network attacks\* happening even though the Internet was designed about 40 years ago. (Mostly focusing on Internet Protocols, not system attacks)

# Logistics

- Blended lecture (from the professor) and presentation (from the students) class
  - Some of the classes (e.g., introductory class) will be covered by the professor (Some lecture can be pre-recorded and uploaded)
  - Some in-depth paper/discussion will be led by the presenters
- Will run a discussion board on Canvas (<https://canvas.vt.edu/courses/115628/>) for your questions and answers
- Students are strongly encouraged to read the paper in advance and actively participate the in-class discussion (and use the discussion board on Canvas!)
- This course will NOT be hard (I'm very proud to say this); I didn't list any papers that you can't understand — this is not a lie
- Spread the words — we need more enrollment :-)

# Lecture Style

- My background is Network + Security
  - Things make sense to me may not make sense to you
  - I'm a non-native speaker, if something doesn't make sense to you please ask me.
- Solution: ask questions!
  - Standing up here in silence is very awkward

# Presentation

- Each student needs to spend **45 minutes** to present a top-tier paper including questions and answers
- Paper will be randomly assigned to each student and the schedule will be posted online
- The list of papers is uploaded (and will be updated) on <https://taejoong.github.io/courses/cs6204/#>

# Course delivery

- This course starts at **5:00pm** on Mondays and Wednesdays
  - I understand that some may not be able to join the class due to such as technical challenges
  - I'll record the lecture/presentation and publish it to Canvas.
- Synchronous + Asynchronous

# Research Project

- You are required to pick one research topic related to the class and perform own research project
  - Bring your topic and discuss with me before October 21st during the office hours or shoot me an email
- Submit your own paper (which is written in Latex, using overleaf.com) before the December 9th



# Grading

<b>Paper presentation</b>	35%
<b>Paper discussions</b>	45%
<b>Research projects</b>	20%