Student Name: **SAMPLE STUDENT** Date: **Sample Date**

Mathematician: Latanya Sweeney

Date of birth – Date of death: 1959- ?

Hometown: Wellesley, MA

Schooling:

- Massachusetts Institute of Technology, Cambridge, MA., Ph.D. in Computer Science 2001. *Computational Disclosure Control: Theory and Practice.*
- Massachusetts Institute of Technology, Cambridge, MA., S.M. 1997 in Electrical Engineering and Computer Science. *Sprees, a Finite-State Orthographic Learning System that Recognizes and Generates Phonologically Similar Spellings.* GPA 4.9/5.0. Finalist in MasterWorks.
- Harvard University, Cambridge, MA., ALB 1995 in Computer Science, Cum Laude. *A Coin Toss: the Dialectical Odds aren't always 50/50.* Honors grades in all courses. Completed graduate courses in computer science, mathematics, physics, educational psychology and philosophy. Delivered graduation speech.
- Undergraduate College - Massachusetts Institute of Technology, Cambridge, MA. 1979 Undergraduate studies in Electrical Engineering and Computer Science.
- High School – Dana Hall Schools, Wellesley, MA. (1977). Valedictorian.

Occupations:

- The Daniel Paul Professor of the Practice of Government and Technology at the Harvard Kennedy School and in the Harvard Faculty of Arts and Sciences
- Editor-in-Chief of Technology Science, director and founder of the Data Privacy Lab
- Former Chief Technology Officer at the U.S. Federal Trade Commission
- Distinguished Career Professor of Computer Science, Technology and Policy at Carnegie Mellon University

Claim to fame:

1. **Introduced** concept of *k*-anonymity, "a property of a dataset that indicates the re-identifiability of its records. A dataset is *k*-anonymous if quasi-identifiers for each person in the dataset are identical to at least *k* – 1 other people also in the dataset."
2. **Collaborated** with Pierangela Samarati (with whom she introduced the concept of *k*-anonymity)
3. **Created** Identity Angel (2006) - a computer program that searches the internet for the 4 pieces of personal information a criminal needs to perform identity theft on a person (name/address/birth date/Social Security number) and alerts the user of breaches in their personal data privacy.
4. **Created** a patented method and system for improved capturing fingerprints, palm prints, and hand geometry
5. **Modeled** the lack of privacy of medical data (and her work eventually led to the establishment of the Health Information Portability and Accountability Act (HIPAA) of 2003)
    a. Example of modeling: How private is your data on the internet? You can answer this question for yourself at the website http://aboutmyinfo.org, which was set up by Latanya Sweeney of Harvard University.

Evidence of Mission Statement:

- Latanya Sweeney's groundbreaking research on the lack of privacy users of the internet have shows that she is a productive, responsible citizen trying to inform others of privacy concerns and how to safeguard their personal information in an ever-changing, global society.
- She wants people to be more well-informed about the consequences of technology so that we can all be safer, more responsible digital citizens.
    - She has written numerous research articles while at Carnegie Mellon University, Harvard University, and while working for the U.S. Federal Trade Commission, but she also created podcasts for public radio and gave TEDtalks to reach and inform the general public of these data privacy issues.

Evidence of SMPs:

- SMP 1: Make sense of problems and persevere in solving them
    - Sweeney studies issues of data privacy and creates ways to protect consumers from identity theft; she advocates for digital privacy through public outreach (podcasts and TEDtalks, etc.) to raise awareness of these issues
- SMP 3: Construct viable arguments and critique the reasoning of others
    - Patients used to believe their personal medical information was private, even if their names were removed from online files – she proved that this was false.
    - Consumers falsely believe they have privacy when they share information on social media or when using "Web of Things" products and devices such as Sleep Number beds, baby monitors, etc.

Important People in the life of Latanya Sweeney

1. Co-workers
    a. Pierangela Samarati (with whom she introduced the concept of *k*-anonymity)

Other interesting information found:

1. … Sweeney is the recipient of the prestigious Louis D. Brandeis Privacy Award, the American Psychiatric Association's Privacy Advocacy Award, an elected fellow of the American College of Medical Informatics
2. … Sweeney has testified before government bodies worldwide to advocate for privacy
    a. …Sweeney is an expert key witness for the Regents of the University of California
3. … Sweeney was the first black woman to earn a PhD in Computer Science from MIT (2001)

Sources Used:

https://latanyasweeney.org/

https://www.iq.harvard.edu/people/latanya-sweeney

https://dataprivacylab.org/index.html

https://techscience.org/

https://www.hks.harvard.edu/faculty/latanya-sweeney

https://cloud.google.com/dlp/docs/compute-k-anonymity

https://www.americanscientist.org/article/uniquely-me

https://www.freepatentsonline.com/7660442.html

https://alum.mit.edu/slice/brief-history-brass-rat

https://www.ftc.gov/news-events/news/press-releases/2013/11/ftc-names-latanya-sweeney-chief-technologist-andrea-matwyshyn-policy-advisor

Print Book: *Changing the Equation: 50+ US Black Women in STEM* by Tonya Bolden