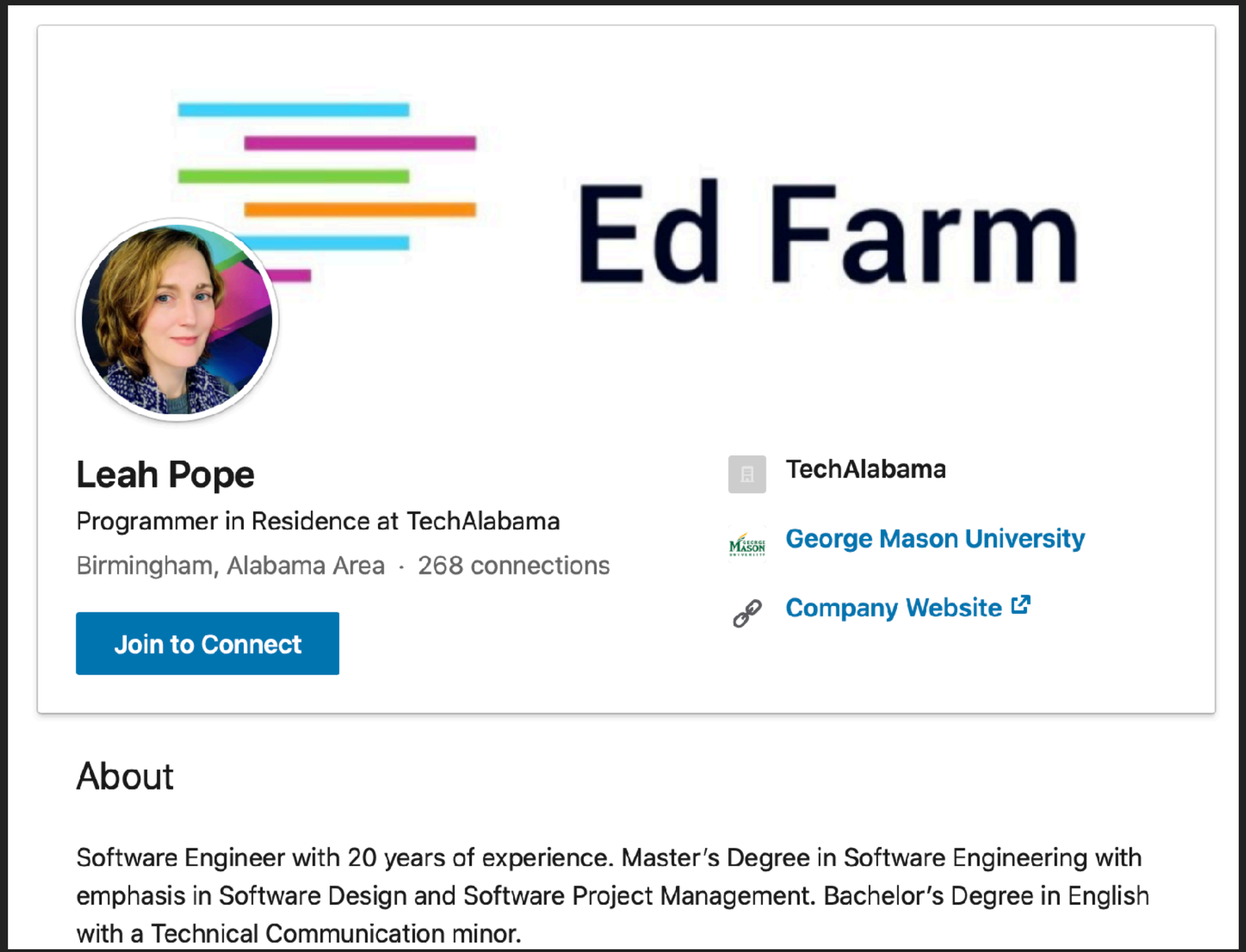
WWCODE BIRMINGHAM: MARCH 2020 CODE CAFE

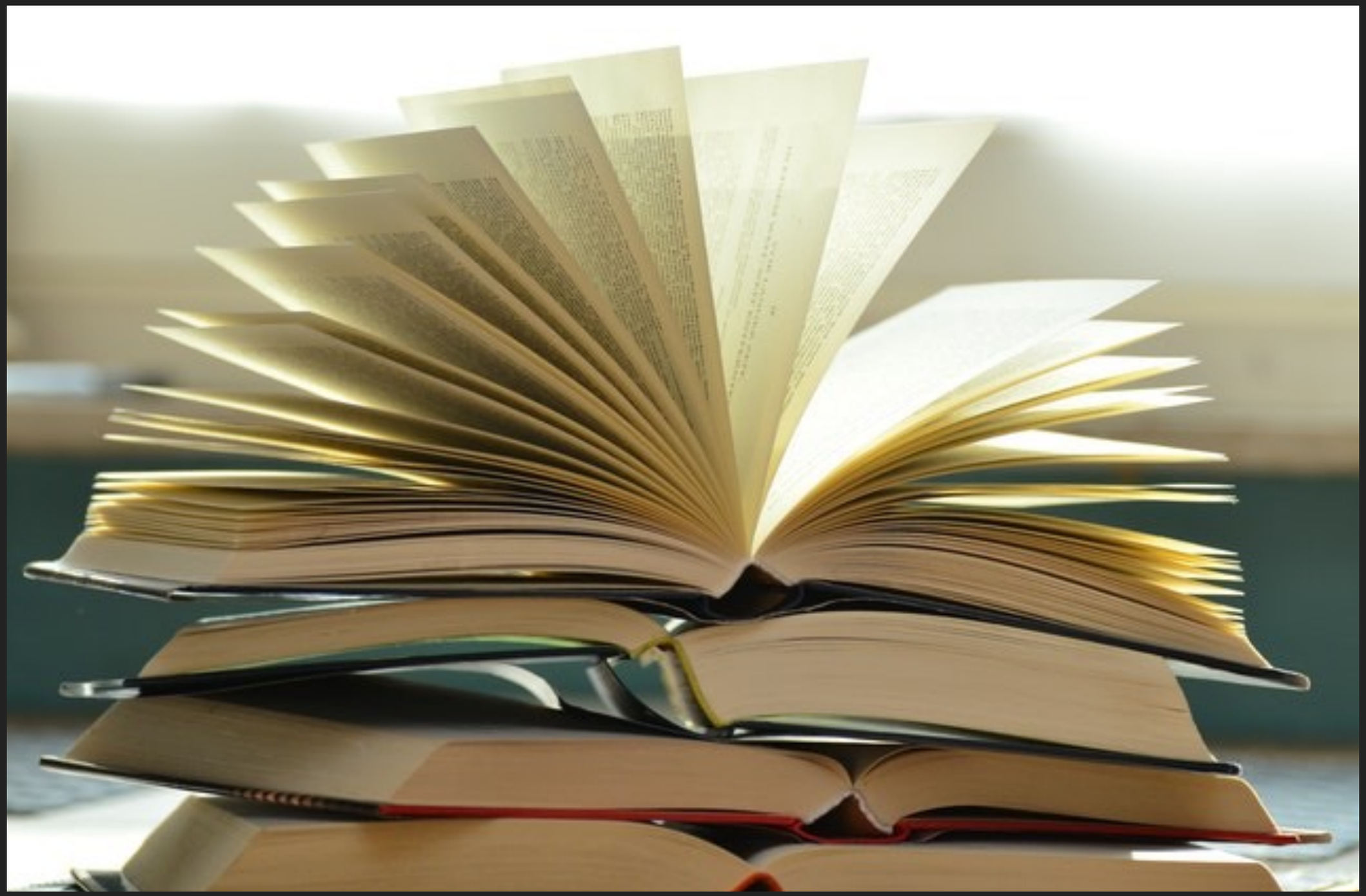
TECHNICAL WRITING: HOW AN ENGLISH MAJOR GOT INTO SOFTWARE DEV

WHO AM I?



Yes, I started with an English degree.

ENGLISH MAJORS UNITE!



ENGLISH MAJORS UNITE!

- 1st Generation College student from rural West Central Alabama
- Knew I wanted to Major in English but how to make a living afterward?
- Author? Journalist? Teacher? Law?
- English Major/ Technical Communication Minor seemed like a good bet

TECHNICAL COMMUNICATION APPLIES TO A WIDE VARIETY OF AUDIENCES IN ANY INDUSTRY (FOR EXAMPLE, BUSINESS, ENGINEERING, HEALTHCARE, MANUFACTURING, MEDICINE, PROFESSIONAL SERVICES, TECHNOLOGY, ETC.).

Technical Communication Body of Knowledge website

https://www.tcbok.org/wiki/about-tc/definition-technical-communication/

MAJOR MOVES

MAJOR MOVES

- First Writing job was as a Writer/Editor at Maxwell AFB in Montgomery, AL
- Relocated to the Washington DC area
- First Technical Writing job was as a “Data Management Specialist”
  - Small defense contractor that built hardware/software systems for US Navy submarines and surface ships
  - Government Contracts required several documents to be delivered along with the hardware/software systems

MAJOR MOVES

- SO…MANY…DOCUMENTS
  - System/Subsystem Design Description
  - Software Requirements Specification
  - Software Test Description
  - Software Test Plan
  - Software Installation Plan
  - Software User Manual
  - and more…

THE VALUE THAT TECHNICAL COMMUNICATORS DELIVER IS TWOFOLD: THEY MAKE INFORMATION MORE USEABLE AND ACCESSIBLE TO THOSE WHO NEED THAT INFORMATION, AND IN DOING SO, THEY ADVANCE THE GOALS OF THE COMPANIES OR ORGANIZATIONS THAT EMPLOY THEM.

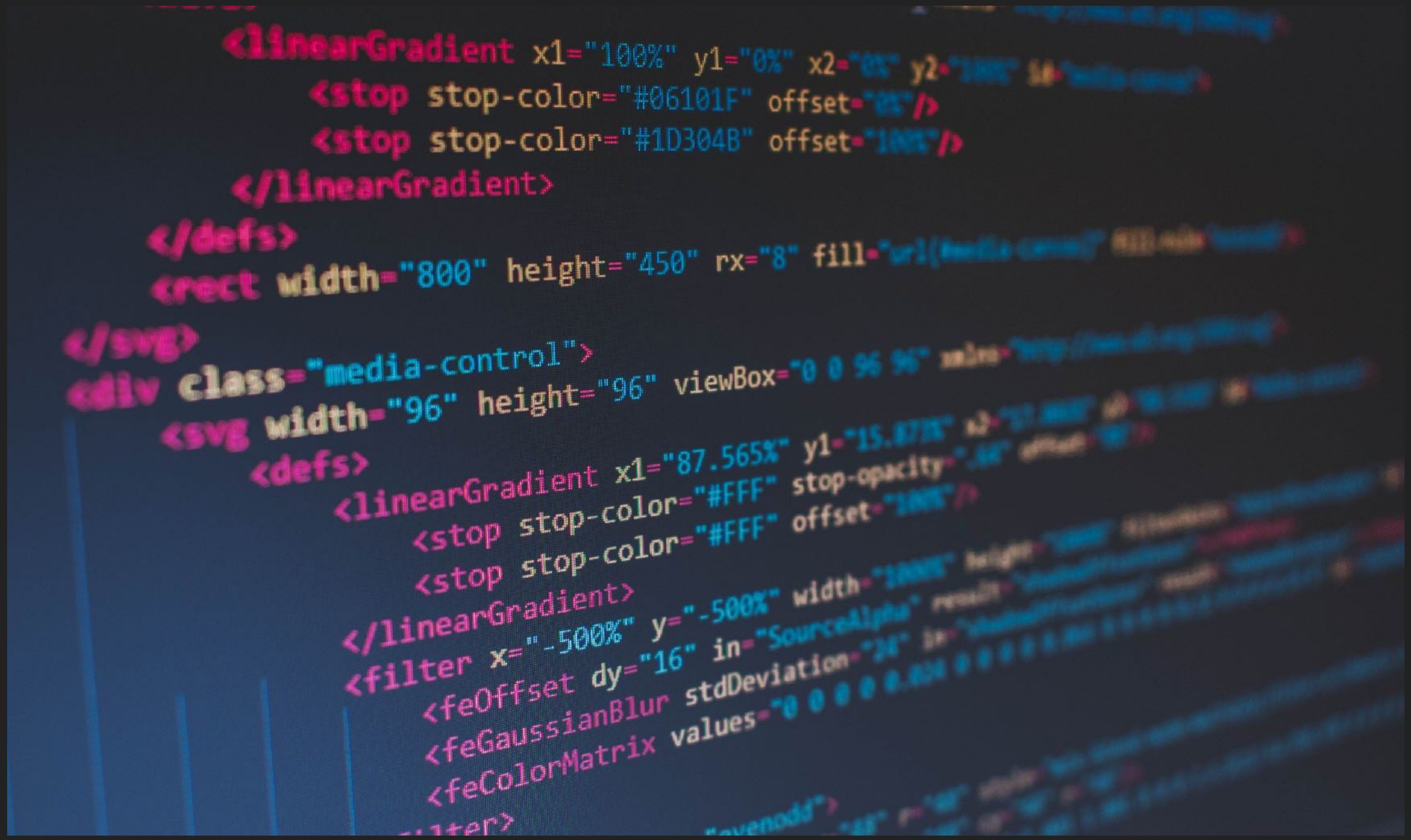
Society forTechnical Communication website

https://www.stc.org/about-stc/defining-technical-communication/

MAJOR MOVES

- Responsibilities in this Technical Writing role were:
  - Editing technical documents and ensuring adherence to the Military Standard templates required by the US Navy
  - Document management/version control – contractually obligated to keep copies of all versions of documents
  - Preparing delivery packages of documents and software
- Stayed at this company for several years but my job changed

FROM DOCUMENTS TO CODE



FROM DOCUMENTS TO CODE

- Learned Web (HTML, CSS, Javascript) and Java programming languages
- Started out writing Graphical User Interface (GUI) code
- Immediate feedback was appealing – what you write is what you see on the screen

FROM DOCUMENTS TO CODE

- First Java programming job was to write software for a submarine Imaging system
- Continued to leverage Technical Communication skills
- Referenced Software Requirements Specification and other Military Standards documents – system had to adhere to guidelines
- Wrote efficient tool-tips for GUI controls – supplementing the Software User Manual

FROM DOCUMENTS TO CODE

- Grew software dev skills on wide variety of projects for several Federal Government organizations
  - Geographic Information System (GIS) application that CDC used for relief effort planning for complex humanitarian emergencies
  - Identity document validation application used by intelligence analysts in their national security mission
- Technical Communication skills continued to be valuable in all of my software dev roles

CREATING SOFTWARE IS MORE THAN WRITING CODE

You get to play with sticky notes too! ;)

CREATING SOFTWARE IS MORE THAN WRITING CODE

- Often became the translator between users and fellow developers
  - These skills were especially beneficial on small teams – the more hats you could wear, the better!
- Handled customer change requests (bug reports) and helped connect the dots between the problems users discovered back to the code that needed to be updated
- Translated user needs –> system requirements –> directions for software developers on what to actually code up
  - Agile software development refers to defining software requirements as “writing user stories”. I ❤️ this phrase.

CREATING SOFTWARE IS MORE THAN WRITING CODE

- Authored software user manuals on multiple projects
- Created and presented technical project information briefings to communicate with management and other stakeholders
- Wrote a technical report which recommended technologies for adoption into users' workflows
- Worked in a "technology matchmaker" role — compared user needs to technology vendors' white papers/documentation/presentations to find good matches
    - Being fluent in Technical Communication enabled better/easier comprehension of technical materials

CREATING SOFTWARE IS MORE THAN WRITING CODE

- Many aspects of creating software involves using or creating technical documentation
  - Design documents to show how new code will plug in
  - Documenting code so other developers can better understand the purpose
- Maintaining internal, “body of knowledge” organization wikis
  - On-boarding for new teammates, sharing tips/tricks/ gotchas, etc.

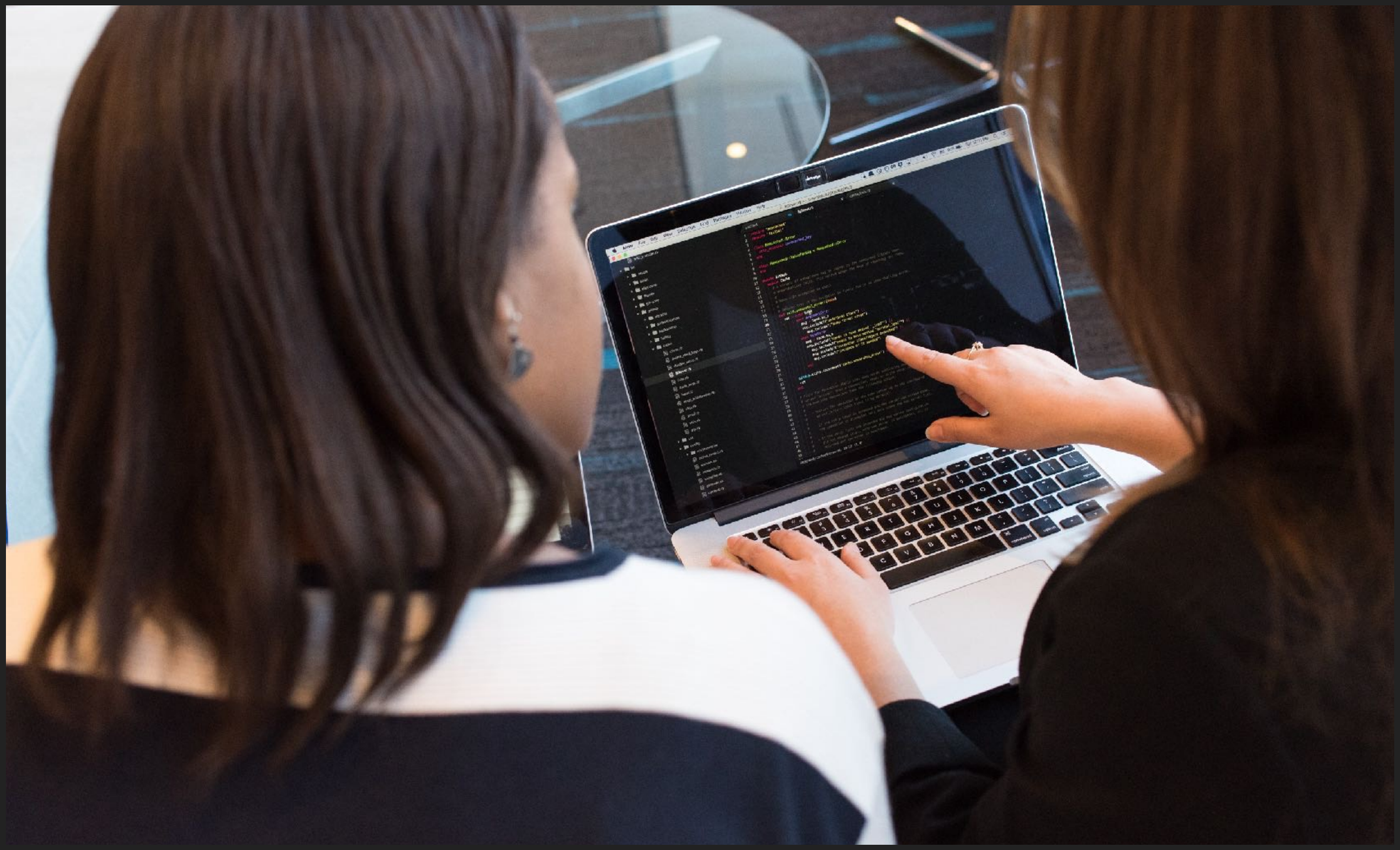
EMPOWERING FUTURE CODERS

Instructing the Pilot cohort of Ed Farm Pathways @ Innovation Depot

EMPOWERING FUTURE CODERS

- As Programmer in Residence at Ed Farm, I co-facilitate an adult learner coding bootcamp
  - Developing Instructional Design skills
    - Create learning content (lectures, code-along examples)
    - Curate external resources for learners
- The go-to person for all things tech
  - Review and recommend tools
  - Manage Slack, Vimeo, GitHub accounts

PARTING THOUGHTS



TECHNICAL COMMUNICATION IS A USER-CENTERED APPROACH FOR PROVIDING THE RIGHT INFORMATION, IN THE RIGHT WAY, AT THE RIGHT TIME SO THAT THE USER'S LIFE IS MORE PRODUCTIVE.

Technical Communication Body of Knowledge website

https://www.tcbok.org/wiki/about-tc/definition-technical-communication/

PARTING THOUGHTS

- Sharing my story not as a “how-to” but as an example. If you don’t take anything else away, I offer this advice.
  - Don’t let imposter syndrome make you afraid to branch out into technical areas!
- Communication skills are **key** in all fields.
- Honor your (possibly liberal arts) strengths and use them to your advantage.

LET'S CONNECT

LinkedIn

https://www.linkedin.com/in/leahspope/

Git Hub

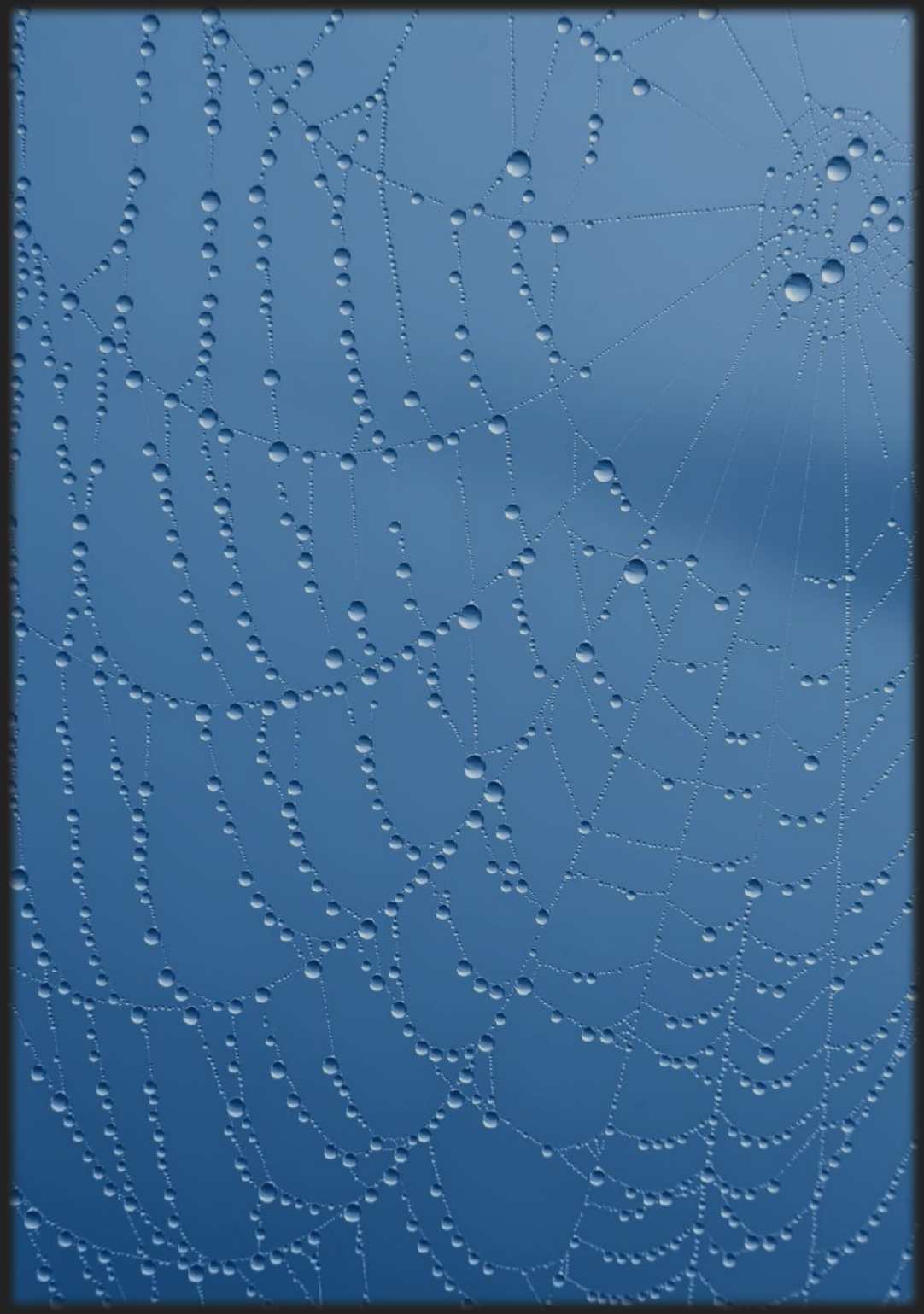
https://github.com/lspope

WWCode Birmingham

https://www.womenwhocode.com/birmingham

Ed Farm

http://www.edfarm.org



WOMEN WHO CODE®

BIRMINGHAM