

## **Minute-taking Final MOSS assignment**

GitHub Repository: <https://github.com/t3rryhuang/Social-Media-Polarisation-Model>

### **First meeting – 25.10.24**

Present: Terry, Blythe, Gro, + Leo via Teams

Time: 14.10-15.00

Discussed project and collectively found a paper we wanted to work on. Decided to read through it until next week, and to meet at the same time next week.

### **Second meeting – 01.11.24**

Present: Terry, Blythe, Gro, + Leo via Teams

Time: 14.10-15.00

Discussed the paper and model again, and delegated who should write what for the project summary. Aims - Blythe, Purpose and Patterns – Gro, Outline methods – Leo, Experiments to be run – Terry. Made an Overleaf file to share this.

### **Meeting at computer-lab Thursday 07.11.24**

Present: Terry, Blythe and Gro

Time: 15.00-16.00

Reread the feedback and all agreed that our initial aims were too similar to the aims set out in the paper we're basing our experiment on. Discussed alternate approaches to make the model more personalised by altering the gamma factor. Instead of setting it to a randomized number between -1 and 1, we take subsets of agents and set their gamma to a narrower range. We are varying these subsets and ranges.

#### **Tasks for tomorrow**

Terry: read Gro's essay on polarization, echo chambers, algorithms, technological determinism. Also begin implementing a basic agent-based influence model.

Blythe: preparing how and what to present tomorrow.

Gro: look into the discourse on social media algorithms and polarization, think of possible shortcomings and ways to alter the model to include other social theory/research aspects.

Leo: N/A – absent from meeting.

### **Meeting at Q&A Friday 08.11.24**

Present: Terry, Blythe and Gro

Time: 11.00 – 12.00

Presented our project and got feedback.

### **Meeting Friday 08.11.24**

Present: Terry, Blythe and Gro (and Leo joined 1 hour later)

Time: 12.00-13.45

Terry explained the formulas and parameters sheet he made, and ran through how the model works.

**Tasks for next meeting:** We decided to meet on Monday as well, and delegated tasks primarily for Gro due to task dependencies;

Gro: read over formulas and parameters sheet, and look further into social theories and relevant discourse to find inspiration on how to alter model.

Leo: read over formulas and parameters sheet.

Blythe: read over formulas and parameters sheet.

Terry: take some time off because he implemented the model and spent a lot of time on this.

### **Meeting Monday 11.11.24**

Present: Terry, Blythe, + Gro and Leo via Teams

Time: 17.00-18.00

Discussed what we could implement or change in the model, and made a list of what we would work on/do research on based on high/medium/low priority.

**Tasks for next meeting:**

Blythe: Write a few paragraphs for the background chapter in regards to the unmodified model, as outlined in the paper. Age demographics are also to be researched.

Gro: Vocality of old people, when do people go online, or offline? Send in equations that could be used to formulate a model.

Terry: Convert the current system's group assignment procedure into more of a spectrum.

Leo: Add births and deaths to the model.

**Meeting Thursday 14.11.24**

Present: Terry, Blythe, Gro, + Leo via Teams

Time: 14.00-15.00

Leo had semi-finished births and deaths implementation. Terry showed us the group membership strength spectrum design and implementation, and the many-to-many relationship between agents and groups. Gro discussed more background research. Blythe presented a draft section of the unmodified, initial model from paper.

**Tasks for next meeting:**

Leo & Terry: Read over Blythe's draft about the previous model to ensure its correct

Leo: Add sliders for birth and death ratios, and a monitor for overall population size, one monitor with both total death and births so far, add effective polarisation (ie How opinions and strengths change over time). Begin writing the technical part about effective polarisation.

Terry: Look into offline polarisation

Blythe: Begin introduction

Gro: Formalise background research and add it to the background chapter

**Meeting Monday 19.11.24**

Present: Terry, Blythe, Gro, + Leo via Teams

Time: 10.45-11.45

Terry showed us the final model and explained what he had implemented.

**Tasks for next meeting:**

Leo: making graphs + and writing ODD

Terry: running and designing different experiments with Gro

Gro: running and designing different experiments with Terry, and writing about them

Blythe: Write about the current implementation

**Meeting Saturday 23.11.24**

Present: Terry, Blythe, Gro, + Leo via Teams

Time: 14.00-15.00

Talked over experiments and how to present them. Decided to meet next Monday at 10.10. Leo had not started ODD so we decided on how to start that.

**Tasks for next meeting:**

Leo: finishing results plots... put them in the results section and start writing about them

Terry: continue refining implementation section, and new methods chapter ?  
ODD - Process overview and scheduling, submodels

Gro: Use notes already taken to improve several chapters, and add more background info, and find sources that are missing in the document now – they were not added. + Discussions section!

Gro and Terry: paste in whatever file

Blythe: ODD – design concepts, beginning,

**Meeting Monday 25.11.24**

Present: Terry, Blythe, Gro, + Leo via Teams

Time: 10.00-11.00

Leo left early (after 20 minutes),

**Tasks for next meeting:**

Leo: did not finish results plots, writing a bit on the discussions part “ok idk I’m just leaving them as is for now and writing a bit, we can check tomorrow in our meeting” – left meeting before we could discuss this. Task has been reassigned to Terry.

Terry: finish ODD, edit the code for the plots that Leo started, correct the logarithmic scale and text size, re-add the plots to the paper. remove the spread-diagrams and justify why we are not using them.

Gro: Expand the limitations section and conduct additional research on existing studies to support the paper, especially in the limitations and discussions-section.

Blythe: Look through Gro’s rewriting of the introduction, and look at the remaining sections and align them closer to revisions provided by Gro.

### **Meeting Tuesday 26.11.24**

Present: Terry, Blythe, Gro, + Leo via Teams

Time: 16.00-16.45

#### **Tasks for next meeting:**

Leo: needs to finish discussions chapter and experiments limitations (only changed one parameter at a time, and we didn’t change any of the alpha or gamma), low run-time – only 5000 ticks + send an email to David

Terry: polarization tables, tipping points,

Gro: implementation limitation: no concrete real-world data for implementation

Blythe: Start conclusion – write at least 1/2

### **Meeting Wednesday 27.11.24**

Present: Terry, Blythe, Gro

Time: 15.00-18.00

Worked on remaining parts, reading through document etc.

### **Meeting Wednesday 27.11.24**

Present: Terry, Blythe, Gro + (Leo did not show up or reply although we had planned to meet to finalize everything)

Time: 18.00

#### **Meeting Thursday 18.11.24**

Present: Terry, Blythe, Gro + Leo via teams for about 1 hour

Time: 20.00 –

Finalised everything