Welcome to the Social Dynamics and Wellbeing Lab. This handbook serves as a guide for all lab members, including students, postdocs, and collaborators, to foster a productive, respectful, and innovative research environment.

The Social Dynamics and Wellbeing Lab, directed by Prof. Munmun De Choudhury at Georgia Tech, was founded in January 2014 by Prof. De Choudhury when she joined Georgia Tech as a faculty member. The Lab focuses on developing novel computational techniques and technologies to responsibly and ethically employ social media for quantifying, understanding, and improving mental health and well-being. The lab's approach is highly interdisciplinary, combining social computing, machine learning, and natural language analysis with insights from social, behavioral, and clinical sciences. This collaborative effort aims to balance methodological contributions with practical impact, embodying the human experience with technology through diverse, quantitative, and qualitative human-centered methods.

The lab is composed of a diverse group of members including PhD, Masters, and undergraduate students, as well as postdocs and alumni, working on a variety of projects. These projects cover a broad range of topics, such as the design of interactive technologies for mental health, analysis of digital trace data through natural language processing, the influence of identity-based factors on mental health experience and expression, the exploration of technology-mediated trauma and narratives, assessing the impact of social media on mental health, and understanding and unpacking the benefits and potential of generative AI technologies in mental health help seeking, among others. This diverse research portfolio underscores the lab's commitment to understanding and addressing complex issues related to mental health and well-being through social media and computational approaches.

The lab's work has been recognized through several awards and has received funding from various prestigious organizations, reflecting the importance and impact of its research in the field. For those interested in joining or collaborating with the Social Dynamics and Wellbeing Lab, contacting them directly through the lab website, this form, or an email to Dr. De Choudhury is the best course of action.

# 1. Lab Culture and Expectations

Prof. Munmun De Choudhury's lab at Georgia Tech celebrates interdisciplinary research at the intersection of social computing and computational social science. Our lab is a dynamic and inclusive environment where intellectual curiosity thrives. We cherish a shared passion for leveraging computational methods to address and understand complex societal challenges. Our research aims to produce meaningful insights and solutions that have a tangible impact on the world.

# Collaboration, Respect, and Teamwork

The success of our lab is deeply rooted in the collaborative spirit and mutual respect among its members. We believe that the diverse backgrounds, experiences, and perspectives each member brings are invaluable assets. Collaboration, within and beyond Georgia Tech, is not just encouraged; it is an integral part of our daily work, as can be viewed in our publications and projects. Regular group meetings provide a platform for discussing ideas, seeking feedback, and brainstorming solutions collectively. We foster open communication through various channels, ensuring everyone has a voice. Emphasizing the importance of teamwork, we work on projects that often involve multiple lab members, as well as experts

in other academic and non-academic institutions. We believe that respect for one another's ideas, time, and efforts is paramount to create a harmonious and productive lab environment.

### Research Excellence, Innovation, and Rigor

Our lab is dedicated to achieving research excellence through innovation and scientific rigor. We strive to produce high-quality, ethical research that contributes significantly to computational social science and mental health. There is no room for shortcuts to success in our culture, and we acknowledge that high quality work necessitates persistent and relentless efforts, in addition to creativity and critical thinking. Lab members are encouraged to set "herd mentality" aside, pursue ambitious research questions, and to think unapologetically unconventionally about the problems they tackle – we truly believe in and live by "thinking out of the box", while "standing on the shoulders of giants." Our work involves the application of advanced methodologies such as machine learning, natural language processing, and social network analysis to real-world issues, but we strongly emphasize novel research in these applications, rather than focusing on work that seeks to deliver only incremental gains. Finally, rigorous peer review, reproducibility, and adherence to ethical standards are critical components of our research process. This commitment to excellence ensures that our findings are robust, reliable, and impactful, as can be noted in the many practical and policy implications that have resulted from the lab's research.

### Independence and Initiative

While collaboration is a hallmark of our lab, we also value independence and initiative. Lab members are encouraged to take ownership of their research projects, remain accountable in their tasks/role, develop their own research questions, and explore new ideas. This autonomy fosters a sense of responsibility and personal investment in one's work. Members are supported in their endeavors through access to resources, guidance from Prof. De Choudhury and senior researchers, and a culture that celebrates innovation and as mentioned before, "thinking out of the box". Balancing independence with collaboration enables members to grow as researchers and contribute uniquely to the lab's collective mission and goals.

### Ethical Research Practices

Ethical considerations are at the heart of our research endeavors. Given the sensitive nature of the data we often work with, such as social media interactions and digital trace data (public and private, both inclusive), adhering to the highest ethical standards is imperative. Lab members are trained to respect privacy, ensure data security, and consider the broader societal implications of their research. We emphasize transparency in our research processes and actively engage in discussions about the ethical dimensions of our work in regular meetings. In addition, our work adopts the best practices that exist in state-of-the-art data science and social computing, and we expect students to adhere to them with utmost care and caution. This commitment to ethics ensures that our research not only advances knowledge but also respects the rights and dignity of individuals and communities.

### Work-Life Balance and Mental Well-Being

The well-being of our lab members is a top priority. Prof. De Choudhury advocates for a healthy work-life balance, understanding that personal well-being is crucial for long-term academic and professional success – after all, our projects are situated in this very well-being space! Our lab culture promotes

flexibility and understanding, recognizing the diverse needs and commitments of our members. We organize regular social activities and team-building events to strengthen our sense of community and provide opportunities for relaxation and rejuvenation. By fostering a supportive environment, we ensure that lab members can thrive both personally and professionally. Please discuss with Prof. De Choudhury your style of working (e.g., what are your preferred work hours, meeting times/format etc.) and how you could achieve a balance between professional success and personal well-being. Lab members are also encouraged to make use of Georgia Tech's mental health and wellbeing resources. The lab is a supportive environment where challenges can be shared openly, including with Dr. De Choudhury.

### **Professional Development**

Our lab is dedicated to the professional development of its members. We offer a range of opportunities to enhance skills, gain leadership experience, and engage with interdisciplinary research. Workshops on writing, presentation skills, and emerging research methodologies are periodically organized. Lab members are encouraged to attend and present at conferences (with funding from the lab, scholarship, or Georgia Tech), providing valuable exposure to the broader academic community and networking opportunities. Dr. De Choudhury also takes a keen interest to assist and mentor students in fellowship application or grant writing, job market preparation, and career planning. This comprehensive approach to professional development helps members achieve their career goals and become well-rounded researchers.

### Diversity, Equity, and Inclusion (DEI)

Diversity, equity, and inclusion are fundamental values in our lab. We actively promote an inclusive environment where individuals from diverse backgrounds and perspectives are welcomed and valued. This diversity enriches our research, allowing us to approach problems from multiple angles and develop more holistic solutions. Our lab culture is one where everyone feels respected and supported, regardless of their background, disciplinary training, or type of research project. Dr. De Choudhury strongly encourages her students to take advantage of programs and initiatives at Georgia Tech and beyond, to enhance DEI, in order to ensure that our lab remains a place where all members can thrive and contribute meaningfully per their strengths and passions.

# **Expectations for New Members**

New members of our lab are expected to embrace the collaborative and innovative spirit that defines our culture. Proactivity, engagement, accountability, and openness to feedback are essential qualities. New members should be eager to contribute to the lab's collective goals while also pursuing their individual research interests. Adhering to our core values of ethical research, mutual respect, and excellence is crucial. By integrating into our supportive and dynamic environment, new members will find ample opportunities for growth, learning, and making significant contributions to our research community.

#### 2. Research Conduct

#### Ethics

Ethical conduct is a cornerstone of all research activities in the SocWeB lab. All research involving human subjects must strictly adhere to Georgia Tech's Institutional Review Board (IRB) policies (or another institution's when appropriate), ensuring that all projects undergo appropriate review and

approval before any data collection, analysis, or dissemination begins. Respect for participant privacy and informed consent is paramount. In our work with human subjects, we ensure that participants are fully informed about the nature of the research being conducted, the use of their data, and their rights, including the right to withdraw from the study at any time without penalty. Lab members are expected to maintain the highest standards of integrity and ethical responsibility, recognizing the sensitive nature of the data often involved in our studies.

### Data Management

Effective and secure data management is critical in all of SocWeB lab's projects, especially when handling sensitive or personal information. Lab members must follow best practices for data security to protect the confidentiality and integrity of research data. This includes using secure storage solutions (approved by Georgia Tech when appropriate), both physical and digital, to prevent unauthorized access. Personal data must be deidentified where possible, and any identifiers that could potentially link data back to individual participants should be removed. Data should not be downloaded on personal devices, shared with others (at Georgia Tech or elsewhere), or used for a purpose outside of the intended research, without prior permission from Dr. De Choudhury. Compliance with data sharing agreements is also essential, ensuring that data is only shared with authorized individuals and entities under agreed-upon conditions, always with permission from Dr. De Choudhury.

# Publication and Authorship

We consider publications as vital part of the research process, and believe that it is crucial that they accurately reflect the contributions of all lab members involved. At the SocWeB lab, the process for determining authorship is transparent and collaborative, guided by recognized academic standards and principles of fairness, ensuring that all participating members of a project get the credit they deserve and commensurate with the degree and nature of their participation. Contributions to the research, including conceptualization, data collection, analysis, and writing, are duly acknowledged often through some form of authorship. The order of authorship is discussed and agreed upon early in the project and revisited as necessary to reflect contributions accurately. Lab members are encouraged to actively engage in the writing and publication process, with support and guidance provided to ensure high-quality outputs that enhance the lab's academic reputation and impact.

### 3. Lab Operations

# Meetings

Weekly lab meetings are a vital component of our collaborative environment. These meetings serve as a platform for sharing research progress, discussing challenges, and brainstorming solutions. Active participation from all members is expected to foster a dynamic and supportive atmosphere. During these sessions, each member has the opportunity to present their work, seek feedback, and contribute to discussions on ongoing projects. This regular interaction ensures that everyone stays informed about the lab's activities and can offer or receive support as needed. Additionally, these meetings are a space for celebrating achievements and milestones, reinforcing our collective commitment to research excellence, as well as to nurture a supportive atmosphere where continuous learning is encouraged.

#### Mentorship

Mentorship is a cornerstone of the professional development framework in our lab. New students are paired with more experienced lab members who provide guidance on various aspects of academic and professional life. This includes assistance with research projects, paper writing, and career advice. The mentorship relationship is designed to be mutually beneficial, with mentors also gaining valuable leadership and teaching experience. Regular check-ins between mentors and mentees ensure that the guidance provided is relevant and timely. This structured support system helps new members acclimate to the lab's culture, navigate the complexities of their research, and plan their career paths effectively. Moreover, this multi-layered mentorship approach ensures that every lab member has access to the knowledge and resources needed to succeed.

#### Tools and Resources

Our lab is equipped with the necessary tools and resources to support high-quality research. This includes access to specialized software, datasets, and computational resources (in the form of in-house secure servers with CPUs and GPUs, VMs, standalone workstations, Georgia Tech research clusters e.g., PACE, cloud resources like AWS, Google Colab, OpenAI, and Microsoft Azure). These are the in-house servers at SocWeB – please use responsibly:

troi.cc.gatech.edu
tribble.cc.gatech.edu
socfleet.cc.gatech.edu
socvulcan.cc.gatech.edu
titan.cc.gatech.edu
tricorder.cc.gatech.edu (has GPUs)
tiramisu.cc.gatech.edu (has GPUs; shared with the CLAWS Lab)

Members are expected to use these resources responsibly and ethically, and as justified by the project at hand. Members are also advised to seek Dr. De Choudhury's permission before using any resource with a budget or cost associated with it. Proper data management, adherence to software licenses, and efficient use of computational power are essential practices. By maintaining high standards in resource usage, we ensure that the lab operates smoothly and that all members have the support they need to succeed in their research endeavors.

# 4. Advising Style of Dr. De Choudhury

Prof. De Choudhury is deeply committed to the growth and development of each student and researcher. To her, the role of an advisor is to enable and empower each advisee to achieve their fullest potential. To that end, she is not interested in creating "clones" of the scholar she is, but rather, in ensuring the unique scholar, with their unique strengths that each advisee could be. Broadly, she believes in fostering an environment where each individual can thrive, offering personalized guidance tailored to the unique needs and aspirations of her mentees. Dr. De Choudhury's approach is both supportive and challenging, encouraging students to push the boundaries of their knowledge and capabilities while providing the necessary resources and advice to help them succeed.

A key aspect of Dr. De Choudhury's advising style is her emphasis on open communication and regular feedback. She maintains an open-door policy, making herself accessible to her students for discussions

about research, career plans, and personal development. Regular one-on-one meetings ensure that students receive continuous feedback on their progress, allowing them to refine their ideas and approaches. Her feedback is constructive and aimed at fostering critical thinking and independent problem-solving skills, essential qualities for any researcher.

Dr. De Choudhury also places a strong emphasis on collaboration and interdisciplinary learning. She encourages her students to engage with peers, both within and outside the lab, to gain diverse perspectives and broaden their research horizons. Her mentorship extends beyond technical guidance, encompassing professional development activities such as improving writing and presentation skills, navigating the academic job market, and building a professional network. By providing these comprehensive support structures, Dr. De Choudhury ensures that her mentees are well-equipped to pursue successful careers in academia, industry, or other professional fields.

Moreover, Dr. De Choudhury is deeply invested in promoting ethical research practices and social responsibility among her students. She instills in them the importance of conducting research that is not only methodologically rigorous but also ethically sound and socially impactful. Her guidance often includes discussions on the ethical implications of research, particularly in areas involving sensitive data and vulnerable populations. This holistic approach to mentorship helps students develop into conscientious researchers who are mindful of the broader impact of their work.

In summary, Dr. Munmun De Choudhury's mentorship and advising style is comprehensive, inclusive, and nurturing. Her dedication to her students' success, coupled with her emphasis on open communication, collaboration, professional development, and ethical research, creates a supportive and enriching environment for aspiring researchers. Under her guidance, students are empowered to achieve their full potential and make meaningful contributions to the field of computational social science.

#### 5. Resources for PhD Students

If you are a PhD student joining or currently at the SocWeB lab, please use the following information, courtesy of Dr. Thomas Ploetz.

### Who are IC PhD students?

For starters, it is helpful for you to understand who makes up the School of Interactive Computing doctoral cohort. IC and its faculty participate in four different computer science related PhD programs – you have been admitted into one of these:

- PhD Machine Learning
- PhD Robotics
- PhD in Computer Science
- PhD in Human Centered Computing

For any of these programs, your home school is IC, i.e., the School of Interactive Computing in the College of Computing at Georgia Tech. All procedural policies and guidelines are defined by your home school (IC) and apply to you – independent of the PhD program you are enrolled into. Individual PhD programs have additional guidelines / requirements – which you will learn about during orientation.

#### What are the milestones that I will meet as a PhD student?

To prepare for your doctoral program, it is first important to familiarize yourself with the key milestones that drive student success in IC. Please review them carefully <u>here</u>.

# What resources do I have to navigate the program?

As a doctoral student, our expectation is that you first review the **program milestones** to be aware of what is required of you during this program. If you have questions, your first resource is always the <u>IC PhD Student Guidebook</u>. You will receive access to the guidebook once you receive your GT email address. This guidebook is your one-stop shop for every step of your program from getting training on how to conduct ethical research through how to announce your final dissertation presentation. It is your responsibility to consult this guidebook prior to reaching out to faculty and staff with questions.

# Who will support me as I complete my program?

Below you will find information on key support people as you progress through your doctoral program.

# Faculty Advisor: Munmun De Choudhury; munmund@gatech.edu

- Provides guidance on courses and research
- Advises student on meeting graduate milestones
- Supports student in locating **GRA/GTA** positions

### Academic Program Manager: Theresa Nash; tnash33@gatech.edu.

- Manages logistical and non-academic advising issues
- Provides policy and procedure guidance
- Assists with registrar functions including registration and forms completion

### Associate Chair of Graduate Studies: Thomas Ploetz; thomas.ploetz@gatech.edu.

- Guides students and faculty through the milestones associated with the doctoral program
- Approves and signs various milestones (through forms)