ESC102 | Team 35

From Building Blocks to Building Bonds: The Art, Engineering and Community of The Toronto Lego User Group

Yiran Feng, Srishti Kutty Krishnan, Sara Parvaresh Rizi, Tracy Qu

Word Count: 1,180

# Table of Contents

1. Our Team Values	2
1.1 Engineering + Design = Engineering Design	2
2. Research on the community	3
2.1. LEGO through History and Education	3
2.2. LEGO Community Terminology	3
2.2. ToroLUG: A Community of Adult LEGO Enthusiasts	3
2.3. ToroLUG's Structure and Community Contributions	3
3. How Our Assumptions Evolved Into Sound Opinions	4
3.1 Will We Feel Like Outsiders?	4
3.2 How Strongly Connected Can They Really Be?	
4. Takeaways and Opportunities	5
5. References.	6
6. Appendices	7
Appendix A - ToroLUG Discord Server Excerpts	7
Appendix B - ToroLUG Official Social Medias	
Appendix C - Survey Responses	10

## 1. Our Team Values

As a team, we approach engineering design as a balance of technical problem-solving and creative exploration - where engineering ensures structure, while design fosters creativity. This profile explores our team's values, introduces the Toronto Lego User Group (ToroLUG), and highlights how its values align with ours. We examine ToroLUG as a space for innovation and shared passion, showing through research and direct engagement how it fosters a supportive environment for LEGO enthusiasts, demonstrating our definition of engineering design in action.

# 1.1 Engineering + Design = Engineering Design

With backgrounds in both analytical and self-expressive disciplines such as visual art and dance, our team recognizes that successful engineering design solutions require finding the equilibrium between function and creativity.

After engaging with multiple communities, we found that the Toronto LEGO User's Group (ToroLUG) most aligned with our values. ToroLUG operates at the intersection of technical precision and creative expression, as shown in their biography [1] (Figure 1). LEGO models typically incorporate both structure and aesthetics—principles that parallel our design philosophy.

Beyond methodology, ToroLUG's core values - personal expression, inclusivity, collaboration, and community engagement (Figure 2) - align closely with our team norms of creativity, collaboration, and mutual support. Engaging with this community allows us to explore how engineering creativity is applied beyond academia, paralleling our perspective that engineering and design are inseparable in developing empathetic and rigorous solutions within engineering design.

# About Us

ToroLUG (Toronto LEGO User Group) is a vibrant community of adult LEGO enthusiasts who share a passion for building, creating, and collaborating. We come together to connect, inspire, and showcase our love for LEGO as both a hobby and a creative medium.

Figure 1 - Screenshot of ToroLUG Website's About Us section. They share passion in building and creating similar to how we aim to integrate engineering and design.

## 1.5 ToroLUG's Values

Respect for Personal Expression:

LEGO is an artistic medium. LEGO creations and collections represent investments of time, money, passion, and heart, and there should be respect and recognition given to all levels of creativity. All creations and collections have value.

## Inclusivity:

Respecting and learning from each other's differences, that there is no one type of LEGO fan (collector, builder, etc). Each person will have different strengths to bring to the table.

## Community Collaboration:

Using LEGO to work together as a LUG to create bigger projects, to learn from each other as builders, and to help each others as builders.

**Figure 2** - ToroLUG Discord "by-laws". Community values closely aligns with our team norms and values, as underlined in yellow. See Appendix B for similar Discord excerpts.

# 2. Research on the Community

Understanding ToroLUG requires exploring its position within the LEGO community and how it serves as a collaborative space for adult LEGO enthusiasts in Toronto. This section examines the history and significance of LEGO and the structure and activities of ToroLUG.

## 2.1. LEGO through History and Education

The name *LEGO* is derived from the Danish words "leg godt," meaning "play well," - a philosophy that continues to define the company's approach to creative building [2]. According to MIT Engineering, LEGO inherently integrates mathematical and physics principles into its designs, helping individuals develop spatial reasoning, problem-solving, and engineering skills [3]. These qualities make LEGO an accessible learning tool for everyone and allow anyone to engage with simple engineering concepts.

## 2.2. LEGO Community Terminology

We will utilize acronyms widely used within the LEGO community, defined below.

• MOC: My Own Creation [4].

• LUG: LEGO User Group [5].

• AFOL: Adult Fans of LEGO [6].

## 2.2. ToroLUG: A Community of Adult LEGO Enthusiasts

Though often seen as a children's toy, LEGO has built a global AFOL community for over 30 years [7]. These groups provide opportunities for collaboration and the sharing of innovative building techniques.

One such community is ToroLUG - a well-established community that nurtures creativity and teamwork in LEGO-based design (Appendix A, Figure 2). The group provides a structured space for skill-building, large-scale projects, design challenges, and public showcases [8]. Members contribute through exhibitions, as seen on their Instagram in Figure 3, where individual and collaborative MOCs are displayed.



Figure 3- A screenshot of the official ToroLUG Instagram, showcasing MOCs, group events with members, and LEGO toy drives.

# 2.3. ToroLUG's Structure and Community Contributions

ToroLUG is a regulated organization with formal bylaws and an executive committee, which is elected annually by its members (Appendix A, Figure 1). They list all rules and specifics of their community in their official Discord server, which has over 140 members.

ToroLUG is dedicated to community outreach, and giving back within the community organizing LEGO donation drives and supporting local initiatives. It provides members with valuable resources, such as:

- LUGBULK A program enabling members to bulk-buy LEGO bricks at discounted rates, supporting large-scale projects [9].
- An active social media presence ToroLUG engages members by showcasing designs and promoting community events through regular posts (Appendix B, Figure 1).
- Charity events ToroLUG LEGO drives encourage members to donate LEGO sets to children in need, reinforcing the community's values of empathy and generosity. One such charity event is posted on their official Facebook, shown in Figure 4 [10]

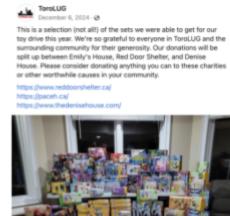


Figure 4- A screenshot of a post from the official ToroLUG Facebook account, showing all the LEGO donations from their community members, donated to charities, or others within ToroLUG.

# 3. From Assumption to Informed Opinions

Each team member had initial assumptions about the nature of a LUG and its members. In this section, we outline these assumptions and how our research and interactions with the community reshaped them.

## 3.1 Will We Feel Like Outsiders?

We assumed that a specialized community like ToroLUG would be exclusive to LEGO experts, making it difficult for "outsiders" like us to participate. We were quickly proven otherwise! The president, Mike, welcomed us into the Discord server, and members on the server were happy to answer our direct messages and share information about the community through our Google Form.

## 3.2 How Strongly Connected Can They *Really* Be?

We assumed ToroLUG was a small, informal group that gathered occasionally. We underestimated the scale of their activities and their deep engagement with design and collaboration.

Despite having little in common beyond their love for LEGO, members have formed a close-knit network of support and knowledge, focused on "celebrating creativity and community through LEGO building" [11]. ToroLUG members emphasize the importance of "being among a bunch of people celebrating the same thing" and having "plenty of opportunities to exhibit [their] MOCs locally" (Appendix C, Figure 1). When asked what they enjoyed most in the community, members reaffirmed these values. "I get to share my hobbies with people who enjoy it as much as me, it is something you don't really find often elsewhere", which shows how special the community is for them (Appendix C, Figure 1).

The inclusivity of the community is further reflected in an interview between the LEGO corporation and ToroLUG AFOL, Erik. He describes the AFOL community as "encouraging and accepting"—consistent with our own interactions with ToroLUG [12].

We spoke with Matt, a University of Toronto 1T6 Chemical Engineering graduate AFOL (Appendix C, Figure 2). Learning that someone with a similar academic background was part of ToroLUG made the community feel more accessible and less intimidating.

Through our research and insightful conversations with members, we were able to evolve our assumptions and apprehensions into well-rounded perspectives.

## 3.3. Looking Forward: Our Next Steps

Each LUG has an ambassador who represents the local community and facilitates connection between AFOLS at different locations [13]. In future inquiries, we wish to connect with them and learn about this community from the organizers' perspectives.

Secondly, we will attend a ToroLUG exhibition as non-members. Such overt observation will provide valuable insight into their creative process and community dynamics, allowing us to observe their workflow in real time.

# 4. Takeaways and Opportunities

Our team greatly appreciates the opportunity to learn more about ToroLUG, a vibrant community for adults with a passion for LEGO that fosters creativity and connects AFOLs in Toronto.

Through survey responses and online discussions with members, we identified several opportunities within ToroLUG, including better organization and coordination of their membership base, the replacement of plastic-based packaging with more sustainable alternatives, and tools to improve brick placement and removal (Appendix C, Figure 3). These insights provide a strong foundation for collaboration that aligns with both the community's needs and our engineering design values.

## 5. References

- [1] "About Us | ToroLUG," Torolug.ca, 2025. https://torolug.ca/about-us/ (accessed Feb. 01, 2025).
- [2] Lego, "The LEGO Group history," www.lego.com, 2022. https://www.lego.com/en-us/aboutus/lego-group/the-lego-group-history?locale=en-us
- [3] S. Jensen, "MIT School of Engineering |» What do Legos have to do with engineering?," *Mit Engineering*, Mar. 06, 2012.

https://engineering.mit.edu/engage/ask-an-engineer/what-do-legos-have-to-do-with-engineering/

- [4] "What is a LEGO MOC?," *BuildaMOC*, 2025. https://buildamoc.com/pages/what-is-a-lego-moc (accessed Feb. 01, 2025).
- [5] "How LUGBULK works—and strategies for making the most of it! BRICK ARCHITECT," *BRICK ARCHITECT*, Jan. 23, 2023. https://brickarchitect.com/lugbulk/ (accessed Feb. 01, 2025).
- [6] "An interview with AFOL Erik," *Lego.com*, 2024. https://www.lego.com/en-us/page/interview-afol-erik (accessed Feb. 01, 2025).
- [7] LEGO, "Fan Engagement and Programs About Us LEGO.com," www.lego.com. https://www.lego.com/en-us/aboutus/lego-group/fan-engagement-and-programs
- [8] "Events | ToroLUG," Torolug.ca, 2025. https://torolug.ca/events/ (accessed Feb. 01, 2025).
- [9] "How LUGBULK works—and strategies for making the most of it! BRICK ARCHITECT," *BRICK ARCHITECT*, Jan. 23, 2023. https://brickarchitect.com/lugbulk/
- [10] [1]J. Opara, "Creations for Charity 2022, Donations in Toronto, ON, Canada," *CreationsForCharity*, Dec. 28, 2022.

https://www.creationsforcharity.org/post/creations-for-charity-2022-donations-in-toronto-on-cana da (accessed Feb. 01, 2025).

- [11] Toronto LEGO Users Group, "Toronto LEGO Users Group (ToroLUG)," Available: https://torolug.ca/. [Accessed: Feb. 1, 2025].
- [12] LEGO Group, "AFOL Spotlight: Erik A Passion for LEGO," Available: https://www.lego.com/en-ca/page/interview-afol-erik. [Accessed: Feb. 1, 2025].

[13] LEGO Ambassador Network, "Toronto LEGO Users Group (ToroLUG)," Available: https://lan.lego.com/clubs/401-torolug/. [Accessed: Feb. 1, 2025].

# 6. Appendices

## **Appendix A - ToroLUG Discord Server Excerpts**

### 4.0 Officers

## 4.1 Executive Officers

The President, Vice President, Secretary, and Treasurer form the Executive Committee. These positions are <u>elected</u>

#### 4.1.1 Presiden

Chairperson for LUG. Their job includes but is not limited to: primary contac person for LUG for outside entities and to Chair all LUG meetings.

### 4.1.2 Vice President

Acts as President in the absence of the President whether temporary or by resignation. Their job includes, but is not limited to: secondary contact person fo LUG for outside entities.

#### 4.1.3 Secretary

To document and maintain a record of group events and meetings, including attendance, by maintaining minutes of meetings and posting them to the designated platform.

#### 4.1.4 Treasurer

To document and maintain financial and physical assets of the group. To maintain a list of the physical assets of the club. To provide a report on current balance of financial assets at executive meetings or as requested.

#### 4.2 Elections and Terms

Any member can nominate themselves for election to the Executive Committee. Secret ballot elections are to be held annually during the Annual General Meeting All terms of office begin on January 1 and end on December 31 of each year. Each term is for one year. One person may hold no more than 3 executive offices. An officer holding multiple offices gets only one vote on executive committee votes. The minimum number of executive officers is 3. In the event of an executive officer resigning or being unable to fulfill their duties midterm, the Executive Committee will appoint an interim officer. Resignations must be submitted in writing via email to contact@torolug.ca, but removal from the LUG will result in automatic resignation of any position held.

#### 4.2.2 Powers of Officers

Each officer is to fulfill the duties of their office to the best of their abilities. If an officer is unable to fulfill their duties, any Executive Officer can make a motion to replace the officer. In the event of replacing an officer, the President or Vice President will call an Executive Committee meeting to appoint a new officer.

## 4.2.3 Executive Committee

The Executive Committee is composed of the following Executive Officers: President, Vice President, Secretary, and Treasurer. If Executive Committee votes are tied, the vote will be re-held with all Officers present. The committee's task is to maintain the LUGs regular business. For the Executive Committee to pass any business it must have a vote of 51%.

### 4.3 Other Officers

Other officers are appointed by the Executive Committee and serve for until the end of the year.

### 4.3.1 Event Coordinator

To provide leadership for specific group interests such as: conventions, bulk orders, or charity events. There may be more than one Event Coordinator position.

## 4.3.2 Information Technology Coordinator

Supervise the web design and maintenance of torolug.ca. Also responsible for overseeing the online presence of the LUG, including, but not limited to, Flickr, Facebook, and Twitter. Operation of these platforms, social media accounts, etc, may be delegated to other members as needed.

## 4.3.3 Coordinator at Large

To provide leadership for ad hoc responsibilities not covered by the other officers. There may be more than one Coordinator at Large.

**Figure 3 -** Screenshots of the *Officers* section (4.0) of the ToroLUG by-laws, as taken from their Discord channel. Notably, the elections and terms section (4.2) is mentioned in the text, which discusses nominations and voting procedures within ToroLUG for executive positions. Information that is most relevant to what is mentioned in the text is underlined.

# 1.3 Mission Statement of Organization

To provide a lifelong passion for creativity and design.

# 1.4 Purpose of Organization

To connect like-minded adult fans of LEGO.

**Figure 2 -** Screenshots of the *Overview of Organization* section (1.0) of the ToroLUG by-laws, as taken from their Discord channel. Specifically, the mission statement (1.3) and purpose of organization (1.4) are outlined.

## 1.5 ToroLUG's Values

Respect for Personal Expression:

LEGO is an artistic medium. LEGO creations and collections represent investments of time, money, passion, and heart, and there should be respect and recognition given to all levels of creativity. All creations and collections have value.

## Inclusivity:

Respecting and learning from each other's differences, that there is no one type of LEGO fan (collector, builder, etc). Each person will have different strengths to bring to the table.

## Community Collaboration:

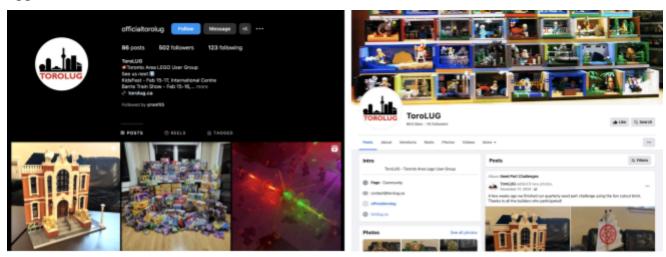
Using LEGO to work together as a LUG to create bigger projects, to learn from each other as builders, and to help each others as builders.

## Bringing people together:

Using LEGO to reach out beyond our LUG to help improve our city and local communities

**Figure 3** - Screenshots of the *Overview of Organization* section (1.0) of the ToroLUG by-laws, as taken from their Discord channel. Specifically, the values of this community (1.5) are defined.

## **Appendix B - ToroLUG Official Social Medias**



**Figure 1** - Screenshot of ToroLUG official *Instagram* and *Facebook* page. These are public accounts that posts all recent activities of ToroLUG, including meetups, charity events, member MOCs and more. The account shares images and keeps people up-to-date on the community (last updated on December 17, 2024) and allows people to further connect and interact with others in the community. These social media channels also provide guidance to their website where visitors can get to know this community more.

## **Appendix C - Survey Responses**

What are some aspects that are the most important as a member of LUG and what do you enjoy the most in the community?

6 responses

I get to share my hobbies with people who enjoy it as much as me. Something you don't really find often elsewhere.

Being in a lug allows me to bring my mocs to shows and events to display. I enjoy showing others what i've built and interacting with the public and answering their questions. Of course there are other benefits to being in the lug. Being around like minded people who enjoy the hobby as much as I do is a huge plus and the four times a year we have in person meetings is a great way to meet other AFOLS in person.

Meeting like-minded people, making friends to share my love of Lego with but also get to know my friends on a personal (non Lego) level, looking forward to events with the community, getting to share out love of Lego with the public at events where we display

It's really nice to be among a bunch of people celebrating the same thing. Lego is unique in that there are limitless ways to use it, so it's really cool to see other people's creations and their building quirks/identity.

LUGs are a great way to meet likeminded people and gain access to opportunities. ToroLUG specifically grants me access to plenty of opportunities to exhibit my MOCs locally, know about deals on discounted sets, and meet other AFOLs who live nearby. While one of the other LUGs I'm in (which is an international LUG known as BioniLUG) Grants me access to displaying MOCs as part of a travelling display across The United States (And sometimes Canada if I push for them to come up to Bricks in the Six).

**Figure 1-** A screenshot taken of the responses to our Google Form sent to the ToroLUG Discord server, asking what they think is most important as a member in ToroLUG. Responses underlined in blue are referenced in the text.

Any other comments?

1 response

This project sounds fun, I have to guess that it's for an APS class? Good luck on the project! (I'm 1T6+PEY)

Figure 2- A screenshot taken from our Google Form, asking if members had any additional comments. One response was from Matt (1T6+PEY), who we later contacted privately through Direct Messages on Discord.

Is there any current challenges faced by the community? Whether from the tools that you have or the resources that you have access to?

6 responses

Distance. Some of the goods are exchanged or sold, shipping is expensive.

we all have day jobs so there's of variety of schedules to try to plan things. A big challenge is moving large MOCs and the logistics to not screw up the setup and take-downs

As we grow (over 140 members currently), it's becoming harder to manage our user base. We're adding a members area to our website to bring added value to our members. There are tools on the market to manage LUGs but they can be expensive.

I have been in the LUG for one year so this is my perspective based on my tenure. I think that the Discord group could be organized better so that we promote sharing of ideas and sharing of builds, since the current setup is a bit unorganized. But I recognize that I spend a lot of time in the Discord, and the club is made up of & run by adults who have families, jobs, etc. These things take time. I hope that ToroLUG can continue growing to keep promoting not just our love for Lego in the public at the events we display at, but that we can create a stronger culture within the club to encourage one another to grow as Lego builders.

The postal strike made things difficult as most aftermarket lego purchases are sent through Canada Post. This meant members had/have to wait for the parts needed for far longer than usual, or just choosing to put some projects on hold until the strike and mail backlog was over.

**Figure 3-** Screenshot from the Google Form sent to ToroLUG members, asking for input about any challenges they may face. Some of the responses are included within the text (underlined), while others were extrapolated from Direct Message conversations with some members on Discord.