UofT ASIC Team

Welcome to the UofT ASIC Team information document! This document should serve as documentation about the ASIC Team and our activities. Please feel free to refer to this document for clarification or more information about the team. We hope that it serves as a form of living documentation for all interested students!

Using the Document Outline (Tabs & Subtabs)

The Document Outline feature allows you to quickly navigate the document using a sidebar that functions like a system of tabs and subtabs. The content for this document is organized into tabs and subtabs through the document outline. Please refer to these tabs to go through the content you're interested in.

To view and use the Document Outline panel:

1. Go to the **View** menu in the top toolbar.
2. Select **Show outline**. A panel will appear on the left side of your screen.
3. Click on any heading in the outline to instantly jump to that section of the document.

Dictionary

Throughout this document you will find a couple of words which probably sound like complete gibberish. Don't fear! This is going to be a dictionary explaining some of the common words we will be using:

IC

This stands for Integrated Circuit. Circuits are essentially descriptors for how electrical components can be laid out, and integration is the act of squeezing them into incredibly small microelectronic packages!

ASIC

Application Specific Integrated Circuit, this describes an Integrated Circuit (see above) which was designed to solve a specific problem.

FPGA

FIeld Programmable Gate Array, FPGAs are ICs that are designed to emulate the behaviour of digital logic on hardware. They're an indispensable tool for the IC prototyping process and used extensively throughout UofT's ECE undergrad curriculum.

About the Team

This document will contain the team structure for UofT ASIC. I want to emphasize that this document is fluid. Positions, teams, and team structure will change as the ASIC team grows. This document aims to provide a high level overview of who's working on what!

Team Leads

Vraj Prajapati

LinkedIn:

Saptarshi Talukdar

LinkedIn: www.linkedin.com/in/saptarshi-talukdar/

Subteams

Webmaster

Director <This could be you!>

Team Members:

- This could be you!

Socials Director

Director <This could be you!>

Team Members:

- This could be you!

CanMUX - UofT Liaison

Director <This could be you!>

Team Members:

- This could be you!

IC Hackathon - Organizing Director

Director <This could be you!>

Team Members:

- This could be you!

Education Director

Director <This could be you!>

Team Members:

- This could be you!

Kompetition Projects

<This could be your project!>

Initiatives

This section will run through the various initiatives that we run with the ASIC team, as well as how you can be involved. This document will update over time as new initiatives are added to the team!

Learning about IC Design

Internal Education Series

As the ASIC Team, we are wholly empowered by the incredible work of open source community (particularly the FOSSi Foundation [Free and Open Source Silicon Foundation!]) The tools from the open source community can be quite different from what you see in class (Quartus, SUE, MAX, etc…). For that reason, we want to give folks a deep introduction to IC design from the perspective of these open source tools. This internal education series will consist of a couple of asynchronous projects/documentation/videos that we will help facilitate throughout the year. Our goal is to get interested IC design engineers (yes, that's you!) skilled up and ready to design your own IC!

When: Throughout the year (asynchronous!)
Where: Online (asynchronous)
Who: Any student who signs up to be a part of the team!
How can you get involved: Sign up, join our discord server and check out the `onboarding` category!

Guest Lectures

While UofT ASIC prides itself on how smart our members are (yes, that's still you!), we admit we don't know everything. For that reason, we like to bring in some experienced folks from industry and academia to give guest lectures on what they specialize in. We hope that these guest lectures serve as insight on how to scale your knowledge from what we learn in the classroom and in undergrad, to what's really being done by professionals in the field. These lectures are scheduled throughout the year, and we hope to

When: You can find more details on the https://lu.ma/uoft-asic for events that happen throughout the year
Where: Most events will be hosted on UofT St George Campus
Who: Events are open to all members of the ASIC Team!
How can you get involved: If you know anyone who's interested in giving a lecture to the ASIC team, let us know!

Designing your own ICs

Design Kompetition - Creating your own Project

Every year, we hold a design competition for interested students to create and design their own IC project. This year it's much less of a "kompetition", and we want to allow students to design and potentially tapeout any project they design. Projects will be accepted on a rolling basis, with each submission requiring the developer(s) to showcase the project they had in mind. Each submission will have to hold prospective milestones for development, the directors who will be involved, structure for the prospective development, and sufficient technical documentation which references existing designs.

When: Rolling Basis for project applications throughout the summer and the start of Fall Semester
Where: Meetings should be held asynchronously or synchronously
Who: Any ASIC Team Member
How you can get involved: Project applications are open on a rolling basis! Check out the information document for the Kompetition here: ASIC Kompetition - Information

Design Kompetition - Working on a Project

Once the projects for the design "kompetition" have been decided upon, applications will open up for members to onboard onto these projects and begin helping with their development. Developers will be able to contribute to the design, layout, optimization, verification, and even validation of the design moving forward. They will be able to experience the full design cycle of an IC project and gain invaluable experience moving forward into their career.

When: Development throughout the year, normally aiming for a tapeout 6 months into the project development cycle.
Where: Meeting location dependant on project schedule
Who: Any ASIC Team Member
How you can get involved: We will make announcements and recruitment forms as projects begin coming up!

IC Hackathon

Our first IC hackathon in 2026 was a huge inspiration for us. Seeing the incredible work that students were able to accomplish in only 7 days motivated us to continue this initiative for the years moving forward. By joining the IC Hackathon, students will be able to quickly onboard onto designing their own IC from workshops and mentorship. They will then submit a design for the hackathon with the potential to win big prizes!

When: Most likely reading week of Spring Semester
Where: UofT St George Campus
Who: Any UofT Student!

How you can get involved: Check out the luma calendar for applications moving forward!

Growing the tools for IC Design

Helping out with FOSSi Foundation Projects

One of our new initiatives this year is to give back to the FOSSi foundation. For students who are interested in the backbone of IC Design, we want to give you the opportunity to learn more about and contribute back to open source tools. Oftentimes more than not, this is focused on the **software** that builds up the space, with complex CAD (Computer Aided Design) and EDA (Electronic Design Automation) algorithms that can effectively place and route components onto an FPGA (Field Programmable Gate Array) or ASIC. For students who come from a software background, this is a really interesting problem that you can apply yourself to and get involved with the semiconductor industry!

Details TBA for this opportunity

Building a Community

This is arguably one of the most important roles for the team moving forward. We want to build a community that all students can easily access and get involved with. This includes collaborations across not only the school, but the entire country! Check out these opportunities if you want to help grow the scope of IC design at the undergraduate level.

Webmaster

We need a website! Somewhat desperately! If you know of any students with experience, or you have experience yourself. Please encourage them to apply to be our webmaster. The webmaster will be in charge of maintaining our web infrastructure and building out a kick ass website for students to be amazed at. It's a role where you will help build the face of the team and be our liaison with the internet.

For those interested, please send an email to team@uoftasic.com with some websites you've made before and what you think an ASIC Website would look like.

Social Media + Graphics

For us to communicate with the world of social media, we need folks who are adept at marketing and communicating with the world. Students helping with this initiative will be growing out our brand new social media platforms and building the precedent for how the world will interact with undergrad IC design. It's a blank canvas for a lot of electronics memes, professional graphics, and social media interaction across the world!

For those interested, please send an email to team@uoftasic.com expressing what you see the UofT ASIC socials looking like, and how you would make that a reality!

CanMUX - Canadian Microelectronics Undergraduate eXpo

The initiative to bring IC design to undergrads is not unique to just UofT. We're partnering with other schools across Canada to bring about CanMUX, an undergraduate focused IC design conference. This conference aims to introduce a lot more students to IC design, and it will showcase the incredible effort that students put into ASIC development. For students interested in helping out with this initiative, you will be working with students from other schools across Canada like UWaterloo, UCalgary, and York University.

Details TBA

IC Hackathon - Organization

Running ASIC Team's IC hackathon is no easy feat. To make this possible, we rely heavily on our team to help with the logistics, planning, judging, marketing, and general organization of the event. For students who want to know what it's like to host an event for hundreds of students and bring IC design challenges to the broader student body, this work is incredibly rewarding. This opportunity opens the door for a lot of students to get into IC design, but we're

Details TBA

Recruitment

This document will be updated throughout the year to reflect recruitment initiatives from the ASIC Team. Updates will also be posted on social channels for the incoming initiatives.

Directorship

We need directors! Directors will act as a liaison to the Team Leads for their subteam. They will be in charge of directing students to accomplish the high level goals of their subteam. We're currently looking for directors for the following teams:

- Webmaster
- Socials

How to Apply

1. Send an email with your profile to the ASIC Team Email (team@uoftasic.com) with more information on why you're interested and your portfolio.
2. Wait for a follow-up email from the ASIC Team email (team@uoftasic.com) for next steps (interviews)
3. Interview with us, tell us a little more about yourself!
4. Wait for the decision!

Application Timeline

- **May 18th** - Applications open
- **Jun 1st** - Applications close
- **Jun 2nd to 8th** - Interviews
- **Jun 8th** - Decisions released

Membership

Any student can join the ASIC Team as a member! As a general member you are free to join and help out with any team you're interested in. To sign up as a member p

How to Apply

1. Fill out the membership form: https://docs.google.com/forms/d/e/1FAIpQLSfcVjaUK3G8a9eFQeG-YlMoNPaecRLAIPZiuMQzkatFe4FCpQ/viewform?usp=publish-editor
2. Join the UofT ASIC Discord Server: https://discord.gg/hrJnP5UsGz
3. Introduce yourself to the ASIC Team and to the teams you're interested in joining!

Application Timeline

Open all year round! Join ASAP

Project Proposals

To be announced!

Rules

These rules apply to any community space shared by the UofT ASIC Team. Please adhere to them, and they will be enforced by the UofT ASIC Team. If you spot any violations of the rules. Please report them to an admin from the team or otherwise contact us.

1. Be kind and respectful: Treat others with kindness, empathy, and respect. Avoid using derogatory language, personal attacks, or engaging in any form of harassment.
2. Keep it clean and friendly: Maintain a family-friendly environment. Avoid using excessive profanity, explicit content, or discussions that may make others uncomfortable. Let's create a space that everyone can enjoy.
3. No spamming or flooding: Avoid excessive posting of repetitive messages or flooding the chat. Keep conversations meaningful and engaging. Quality over quantity!
4. No spoilers without warnings: If discussing movies, TV shows, books, or other media that could contain spoilers, use spoiler tags or provide ample warning beforehand. Let's respect each other's enjoyment and avoid spoiling surprises.
5. Encourage positivity and constructive conversations: Engage in discussions that are respectful and constructive. Avoid spreading negativity, and focus on finding common ground and fostering a friendly atmosphere.
6. Respect everyone's boundaries: Understand that people may have different opinions and comfort levels. Be mindful of others' boundaries, and avoid pressuring anyone into uncomfortable situations.
7. No excessive mentions or pinging: Avoid spamming mentions or pinging multiple users without a valid reason. Respect others' notifications and only ping when necessary or to bring attention to important matters.
8. Advertising without the explicit permission of UofT ASIC admins is strictly banned. If you would like to promote on this server, please message us first for approval!

UofT ASIC Team Code of Conduct

TL;DR

> **Be respectful. Harassment and abuse are never tolerated.**
>
> If you are in a situation that makes you uncomfortable in any shared space with the UofT ASIC Team, if the shared space itself creates an unsafe or inappropriate environment, or if interacting with an organizer or representative makes you uncomfortable, please report it using the procedures included in this document.

Our Values

The **UofT ASIC Team** stands for inclusivity. We believe that every single person has the right to work in a safe and welcoming environment.

Harassment Policy

Harassment includes but is not limited to offensive verbal or written comments related to gender, age, sexual orientation, disability, physical appearance, body size, race, religion, social class, economic status, and veteran status.

Additional cases of harassment include but are not limited to:

- Sharing sexual images, violent depictions, or vulgar language.
- Deliberate intimidation, stalking, following, brigading, or doxxing.
- Harassing photography or recording.
- Sustained disruption of talks or other activities.
- Inappropriate physical contact and unwelcome sexual attention.

In particular, individuals should not use sexualized images, activities, or other material both in their projects and within the shared space. Booth staff (including volunteers) should not use sexualized clothing/uniforms/costumes or otherwise create a sexualized environment.

If what you're doing is making someone feel uncomfortable, that counts as harassment and is enough reason to stop doing it. Members asked to stop any harassing behavior are expected to comply immediately.

Sponsors, judges, mentors, volunteers, organizers, staff, and anyone else participating in the shared space are also subject to the anti-harassment policy.

Enforcement

If an individual engages in harassing behavior, the **UofT ASIC Team** may take any action it deems appropriate, including warning the offender or expulsion from the environment with no eligibility for reimbursement or refund of any type.

If you are being harassed, notice that someone else is being harassed, or have any other concerns, please contact the organizing team immediately using the reporting procedures defined below.

Organizers can help members contact campus security or local law enforcement, provide escorts, or otherwise assist those experiencing harassment to feel safe within the shared space. We value your attendance.

We expect members to follow these rules in all shared spaces, whether physical or digital, and in all interactions related to the UofT ASIC Team.

Reporting Procedures

If you feel uncomfortable or think there may be a potential violation of the code of conduct, please report it immediately. All reporters have the right to remain anonymous.

By sending information to the general reporting line, your report will go to our incident response team members.

- **General Reporting Email:** team@uoftasic.com

Policy Amendments

The UofT ASIC Team reserves the right to revise, make exceptions to, or otherwise amend these policies in whole or in part. If you have any questions regarding these policies, please contact us at team@uoftasic.com

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EngSoc Complaints Policy

I want to make you all aware of the **Engineering Society's complaint resources**! These resources are here to support you, and I would encourage you to give them a read and leverage if necessary. You will find the policy document on the EngSoc document storage: https://github.com/skule/bylaws/blob/master/policies/Policy-on-Complaints.pdf

Please contact the ombudsperson (ombudsperson@g.skule.ca) with any questions or concerns.

Contacts

If you have any questions, comments, or concerns. Please reach out to us on our various platforms:

Email: team@uoftasic.com

Discord: https://discord.gg/hrJnP5UsGz

Instagram: @uoftasic