



HACK 101A Hackathon Fundamentals





KnightHacks & ACM / ACM-W @ UCF

HACK 101A Hackathon Fundamentals



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Syllabus

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- Who Hackathons Are For
- Admissions Process
- Travel Logistics

- Typical Hackathon Schedule
- Building a Team
- Ideation
- Making Your Idea
- Judging
- Q & A

Hackathon Experience

2019

- UCF KnightHacks
- USF Hackabull
- Stetson HatterHacks
 Won Particle IoT Track
- FIU ShellHacks
- HackFSU

Won – State Farm 100 for Good

Georgia Tech - HackGT

2020 Spring

- MIT RealityHack
 Won Volvo Mobility Track
- UF SwampHacks
 Won Carnival Cruise Line Track
- Georgia Tech Hacklytics
 Won Best Use of ML
- HackNYU
- NYU HackAgainstCOVID Funded – Twilio Impact Access
- UKY CatHacks Won – Best Solo Hack
- Cambridge CamVsCOVID
 - Won 1st Place Overall
- Ryerson RUHacks
 Won 3rd Place Overall
- OxfordHack

2020 Fall

- John Hopkins MedHacks
 Mentor / Judge
- UPenn PennApps
 Mentor / Top 10 & Top 3 Judge
- HackMIT
 Mentor / Judge
- FIU ShellHacks*

 Mentor
- UCF KnightHacks Mentor / Judge
- Georgia Tech HackGT*
 Mentor

Hacking Spirit: The Hacker Way

"Hacking is an approach to problem solving.

It is both humble and optimistic in its conviction that anything that has been built, even by the hacker herself, can be improved."

- Andrew 'Boz' Bosworth, Head of Facebook Reality Labs

"Hackathons are for the highly experienced"

- Hackathons are about winning
- Hackathons are about prizes / prestige
- Hackathons are the ultimate cutthroat competition



Hackathons are For Everyone

- Meet Fascinating People
- Visit New Places
- Create Cool Projects
- Play With Cutting-Edge Tech
- Learn New Skills

- Free Food / Swag
- Social Events
- Advance Your Career
- Win Prizes
- Friendly Competition

Winning Prizes



Friendly Atmosphere



Collaboration



Fun / Social Events



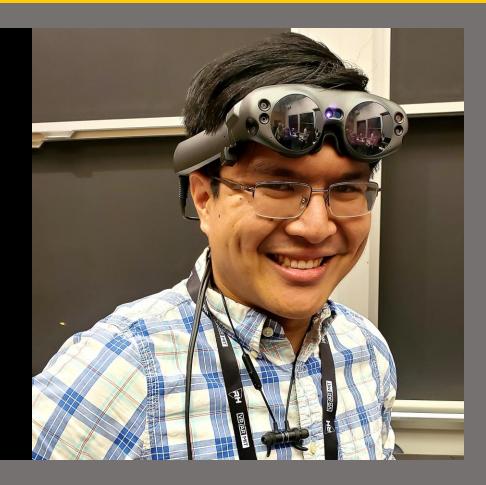
Meet Fascinating People / Visit New Places

- Meet People From All Over
- Visit Other Cities / Campuses



Cutting Edge-Technology

- Discover What You're Passionate About
- Augmented Reality / Virtual Reality
- Data Science / Machine Learning
- Internet of Things



Learn New Skills



Free Food



Swag

- Shirts!
- Badges
- Water bottles



Advance Your Career



Admissions Process

- Apply Early!
- Travel Reimbursement Deadlines

- Resume
- Short Answer Questions
- Shirt Size / Address
- Diet Restrictions

Traveling to Hackathons

Driving

- Travel Reimbursement for Gas
- Carpooling Road Trip!

Flying

- No Travel Reimbursement*
- Closing Ceremony Delays

Typical Hackathon Schedule

Friday

- Travel to Hackathon
- Check-in
- Opening Ceremony
- Team Formation
- Sponsor / Career Fair
- Sleep

Saturday

- Hacking
- Social Events
- Workshops
- Sleep

Sunday

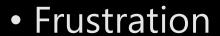
- DevPost Submission
- Judging
- Closing Ceremony
- Go Home

Team Formation

- Two Approaches:
 - Start with Idea –
 Build Team
 - Start with Team –
 Build Idea
- Diversity is Key:
 - Different Technical Skills
 - Subject Matter Experts



Ideation - FPS



- Problem
- Solution



Scope - MVC

- Minimum Viable Concept
- Does this feature help demonstrate the core idea?



The Tools to Build Your Idea

Frontend

- Web
- Mobile Android / iOS
- Desktop
- Hardware
- Low Code / No-Code / Figma

Backend

- Cloud AWS / GCP / Azure / IBM / OCI
- Node.js / Flask / Django

Machine Learning / Data Science

- Kaggle Datasets
- Tensorflow / SciKit-Learn

Judging Formats

In-Person

- Expo / Science Fair Style
- Presentation Style

Virtual

- Submission Video
- Expo / Science Fair Video Rooms



What Judges Look For

- Impact
- Feasibility
- Technical Difficulty
- Novelty



Upcoming Hackathons (Digital)

FIU – ShellHacks

September 25th – 27th

https://shellhacks.net/signUp



UCF - KnightHacks

October 9th – 11th

https://knighthacks.org/register

https://knighthacks.org/discord





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Hackathon Fundamentals HACK 101A - Q & A

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