

# Jacob Ginesin

+1-610-304-4405 | [ginesin.j@northeastern.edu](mailto:ginesin.j@northeastern.edu) | [jakeginesin.in](http://jakeginesin.in) | [github.com/jakeginesin](https://github.com/jakeginesin)

## EDUCATION

---

- Northeastern University** Aug 2021 - May 2025  
*BS in Computer Science and Mathematics* Boston, MA
- **GPA:** 4.0/4.0
  - **Relevant Coursework:** Foundations of Cybersecurity, Calculus 3, Introduction to CS Research, Discrete Structures
  - **Activities:** NU Blockchain Organization, NU Security Club
- University of College Dublin (Study Abroad)** Aug 2021 - Dec 2021  
*Dublin, Ireland*
- **GPA:** 3.84/4.0
  - **Activities:** Netsoc, Elecsoc
- Plymouth Whitmarsh High School** Sep 2017 - Jun 2021  
*Plymouth Meeting, PA*
- **GPA:** 3.9/4.0 | Graduated Summa Cum Laude
  - **Relevant Coursework:** AP Computer Science, AP Physics C, AP Calculus BC, AP Stats
  - **Activities:** Competitive Programming Club, Varsity Wrestling, Varsity Track, FIRST Robotics, Technology Student Association, Chess Team, Chemistry and Calculus tutoring, SAT math tutoring

## EXPERIENCE

---

- Research Assistant** Feb 2022 – Present  
*Network and Distributed Systems Security Lab (NDS2)* Boston, MA
- Working on probabilistic CTL-based finite state machine repair
  - Work is part of a larger lab project, where we're employing NLP to derive FSMs from RFC documentation, then systematically testing their security
- Full Stack Developer** Jul 2020 – Oct 2020  
*Onfour - Virtual Concert Startup*
- Worked closely with the founding team in order to devise methods to improve the experience of fans and artists for virtual live concerts.
  - Designed, programmed, and implemented ReactJS components
  - Built and implemented a chat server using Socket, NodeJS, and MongoDB
  - [Code](#)
- Information Technology/Camp Counselor** Jun 2019 - Aug 2019  
*Independent Lake Summer Camp* Thompson, PA
- Managed, secured, and upgraded a large computing network used daily by 600+ Campers and 150+ staff
  - Taught campers how to build model rockets and how to use Photoshop
  - Solved miscellaneous technical issues around camp
- Lifeguard** Jul 2018 - Sept 2018  
*Plymouth Swim Club* Plymouth Meeting, PA
- Provided direct supervision and maintained safety standards for all individuals using the swimming pool
  - Certified Lifeguard/First Aid/CPR/AED from American Red Cross
  - Administered first aid on several occasions

## TECHNICAL SKILLS

---

**Languages:** C++, Java, Python, Javascript, Go, Rust, Shell, Solidity, C, Lua, Racket, PHP, HTML, CSS  
**Libraries:** NodeJS, NumPy, Tensorflow, PyTorch, Keras, OpenCV, Matplotlib  
**Frameworks:** ReactJS, Django, JQuery, ElectronJS  
**Software:** Linux, Git, Latex, MathJax, Excel, Vim, Metasploit, Wireshark, MongoDB, MySQL

## ACTIVITIES

---

### **Open Source Contribution**

- Contributed code to Ethereum, Monero, Algorand, and FreeCodeCamp
- Actively involved in respective developer communities

### **Idaho National Labs Cybersecurity CTF**

- Invited to compete in INL's cybersecurity competition at their multi-million dollar mock chemical plant
- Competed as captain of the red (attackers) team, leading 12 seasoned cybersecurity professionals

## PROJECTS

---

### **Discipline Management System**

- Utilized by Plymouth Whitemarsh High School
- Built using PHP, MySQL, and Bootstrap

### **Personal Website - [jakegines.in](http://jakegines.in)**

- Selfbuilt Website and Blog
- Receives around 50 views per day
- Built using NodeJS, ExpressJS, and MongoDB
- [Code](#)

### **Chrome Extension - [New Tab Custom URL](#)**

- Published Chrome extension that changes the URL of a newly opened tab
- [Code](#)