

# Joseph Thomas Hines III

## Education

Drexel University, Philadelphia, PA. **GPA:** 3.79.  
*Anticipated Graduation:* June 2021.

**Master of Science, Computer Science.**  
**Bachelor of Science, Computer Science.**  
*Minor, Technology Innovation Management*

## Honors and Awards

- **Drexel College of Computing and Informatics Dean's List**, x8
- **A.J. Drexel Scholarship**, Drexel University, 2016 - Present
- **Certificate of Merit**, Career Management and Profession Development, Drexel University, Winter 2017.

## Skills

- **Operating Systems:** Arch Linux, Windows, OSX
- **Software:** VSCode, Microsoft Office, Azure DevOps, IntelliJ, Eclipse, Visual Studio
- **Languages:** JavaScript, TypeScript, CSS, Sass, Python, Go, Bash, Haskell, Java, SQL, C, C++
- **Tools/Libraries:** Git, Docker, npm, React, numpy, Keras, Flask

## Activities

- *Member*, Upsilon Pi Epsilon, Drexel Chapter, Fall 2019 - Present
- *Participant*, Philly Codefest 2018

## Experience

**Bentley Systems**, *Web Development Co-op* (9/18 - 3/19)

- Created and maintained a well-designed internal style guide, library, and framework specific components.
- Developed a React component system for internal use, using style from aforementioned library
- Aided in development of GraphQL service for unifying multiple internal endpoints
- Developed UI components/examples showcasing how to interface with GraphQL service

**Penn Mutual Life Insurance**, *Software and Web Development Co-op* (9/17 - 3/18)

- Developed and maintained various REST APIs and internal web interfaces
- Worked with lead users to facilitate transition to one unified internal application
- Finished first release of internal web application, positive feedback from 100s of users across the company

**Rockledge Borough**, *Public Works Laborer* (12/16 - 1/19)

- Manage inventory of industrial grade tools and machinery at garage
- Maintain cleanliness of garage as well as neighborhood parks and streets
- Operate various machines for park and street maintenance/construction projects
- Complete manual labor to enable colleagues to be more efficient

## Projects

**Learning To See in the Dark**, *Machine Learning, Frontend Web* (CS583 - Computer Vision)

About: [jzlotek.github.io/cs583-final/](https://jzlotek.github.io/cs583-final/)

- **Technology:** python3, tensorflow, keras, Flask, npm, React, JavaScript, CSS, Google Colab
- Started with the repository produced by a research project, written in a deprecated tensorflow version
- Translated the 27-layer CNN to keras and optimized all processes to be batched and run on average hardware
- Created a simple webapp that allowed users to upload images and receive that output of the model

**Municipal Solutions** *Fullstack Web* (CS530 - Designing User Interfaces)

Source: [github.com/josephthomashines/cs530-project](https://github.com/josephthomashines/cs530-project)

- **Technology:** python3, Flask, sqlite3, Bootstrap, JavaScript, OpenLayers, CSS
- Using experience from public works, create a solution for planning road closures
- Enable users to create and sign into accounts, where they can create and work on several projects
- Allow users to interact with a map and place resources like barricades and vehicles
- Combine the map with a personnel list and a plan to make a fully integrated workflow
- Generate a report detailing the resources required for the plan and how to execute it

**Checkers** *Fullstack Web* (CS451 - Software Engineering)

Source: [github.com/josephthomashines/cs451-project](https://github.com/josephthomashines/cs451-project)

- **Technology:** npm (yarn), TypeScript, express, CSS
- Create an online multiplayer checkers game, using the USACheckers ruleset
- Enable players to enter a queue on the server and be paired into games
- Provide a simple and fast interface to enable a satisfying gameplay experience