

# Helena Shangguan

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## EDUCATION

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**Smith College**, Northampton, MA

Expected in May 2022

- Majors: Computer Science, Mathematics & Statistics
- Relevant Coursework: Intro to CS Through Programming, Programming with Data Structures, Intro to Data Sciences, Computer Graphics
- Cumulative GPA: 4.0/4.0

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## EXPERIENCES & PROJECTS

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**Summer Research Fellowship Program**, *Student Researcher*, Smith College May – Aug, 2019

- Conducted independent research on offline handwritten Syriac text recognition system
- Implemented a deep-learning model in **python** with Numpy, CV2, and TensorFlow libraries
- Segmented pages of Syriac manuscripts into word-images in **Matlab**; Trained neural networks and improved recognition accuracy by 25% through data augmentation

**SisterHacks Hackathon**, *Award Winner*, Bryn Mawr College

Mar, 2019

- Created a digital version of a vintage board game “Wanted!” in **python**; Allowed two players to interact with the keyboard to perform speed-based tasks when cards are displayed, with the slower or wrongly reacted player penalized; Won **Outstanding Project Award**
- Participated in 3-D Printing Modeling Workshop and Web Development Workshop

**Database Querying**, *Class Project*, Smith College

May, 2019

- Examined gender disparity within the film industry; Used **SQL** to retrieve relevant data and did data wrangling work in **R**; Crafted a data-driven article, replete with hyperlinks, images, data tables, and graphics;

**Interactive Fiction**, *Individual Project*, Smith College

Feb, 2019

- Designed and developed in **Java** a choice-based interactive fiction about escaping a spooky mansion; Allowed players to type commands and search for items to open locked exits; Created a time system, in which day and night narratives differ; Provided multiple endings

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## ACTIVITIES

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*Light Board Operator*, MFA Thesis Dance Concert, Smith College

Feb, 2020

*Secretary*, Chinese Student Association, Smith College

Aug, 2019-present

*Member*, Smithies in CS, Smith College

Sep, 2018-present

*Dancer*, Smith K-pop dance crew, Smith College

Sep, 2018-present

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## HONORS

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**Bert Mendelson Prize** from the Computer Science Department

May, 2020

**Arthur Ellis Hamm Prize** awarded on the basis of the best first-year student’s record

Aug, 2019

**Dean’s list** at Smith College

2018-2019

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## SKILLS

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**Technical Skills:** Java(2.5 years), Python(1 year), R, SQL, Matlab, JavaScript, HTML

**Languages:** English, Chinese, Japanese