## **Thesis Project Portfolio**

Wing: The In-Person Dating App

(Technical Report)

**Teen Instagram Addiction** 

(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science
University of Virginia • Charlottesville, Virginia

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Bachelor of Science, School of Engineering

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Department of Computer Science

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Prospectus

## **Sociotechnical Synthesis**

How can people promote a shift from online to in person interactions? Social interaction is vital to mental and physical health. More sociability has been linked to higher self esteem and less depressive symptoms (Pachucki 2014). In-person interactions promote mental and physical health.

Among young American adults, many social interactions that were once in person now occur remotely, for example on mobile dating apps. People often judge others solely on the basis of photos and bits of text. To promote direct interpersonal relationship building, a dating app is proposed in which the first interaction is face-to-face. Instead of swiping through profiles, the user would receive alerts if a compatible match is nearby. Through notifications, the app would then recommend that they meet. The frontend was developed in React-Native and is served data by a Postgres database via a Flask API. The services are hosted on AWS; a relational database service stores the user data. A simple storage service bucket stores user profile pictures, and an elastic compute cloud instance hosts the API. During a beta launch event, 30 users downloaded the app and made over 50 new matches resulting in conversations with new people.

In the US, how are teens and Instagram competing to shape perceptions of the proper place of the platform in teens' lives? Instagram's features can make it addictive, especially for youth. Other Instagram features aimed at helping teens stay safe on the platform have had little benefit, or even addictive effects, leaving teens defenseless. Many teens who struggle with Instagram addiction need help managing it. Instagram is an addictive platform that exploits teens' psychological reward system. It has failed to supply teens with effective preventive features, leaving them defenseless.