

Sahar Farzanehpour
Virginia Tech
saharfarza@vt.edu

Dr. Chris Brown
Virginia Tech
dcbrown@vt.edu

Swanand Vaishampayan
Virginia Tech
swanandsv@vt.edu

Introduction/Goals

To understand the problems with existing resume parsers in job application process.
Getting participants' opinion on online profiles.
Explore the feasibility of replacing resumes with online profiles.

Research Questions

- What are candidates' perspectives on Automated Resume Parsers with regards to procedural justice?
- How do candidates perceive automated resume parsers?
- What features should an ideal automated resume parser for candidates demonstrate?

Resume Parsing Survey

Survey questions focus on four pillars of procedural justice:

- Equality
- Fairness
- Trust
- Transparency

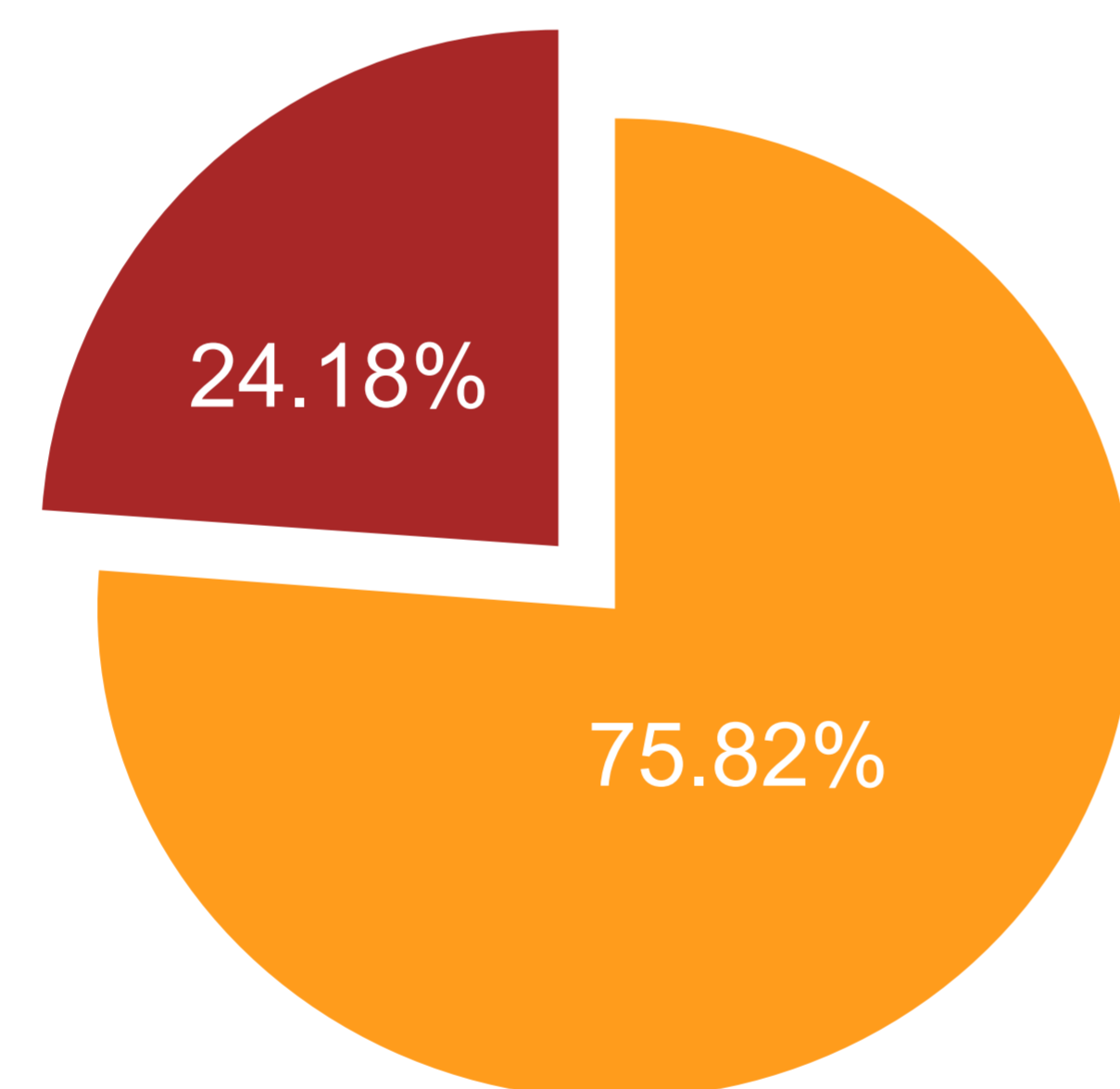


[Link to the paper for more info](#)

Lessons Learned Based on Resume Parsing Survey Results

- Participants feel distrust toward AI-based automated resume parsers, and prefer human reviewers for resumes while providing a variety of idea for features to improve the fairness of these systems.

- Automated Resume Parser
- Human HR Representative



- The team propose guidelines for future Automated Resume Parser designs to promote equity, diversity and inclusion in the tech workforce.

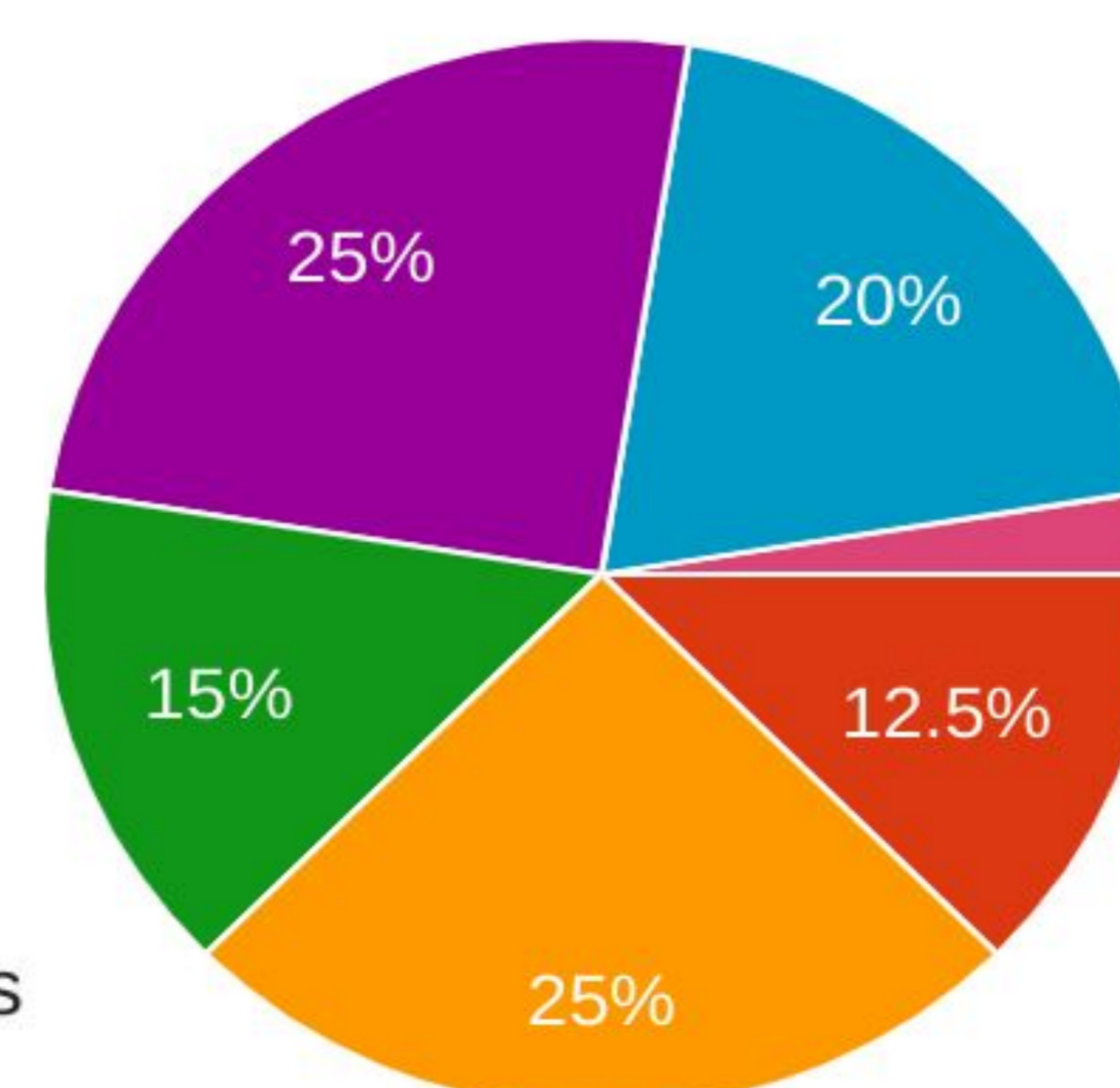
- These guidelines are:
 - Avoid programming errors
 - Incorporate transparency
 - Incorporate explainability
 - Make resistant to data perturbations
 - Human-centered design

Resume vs. Online Profile Survey Results

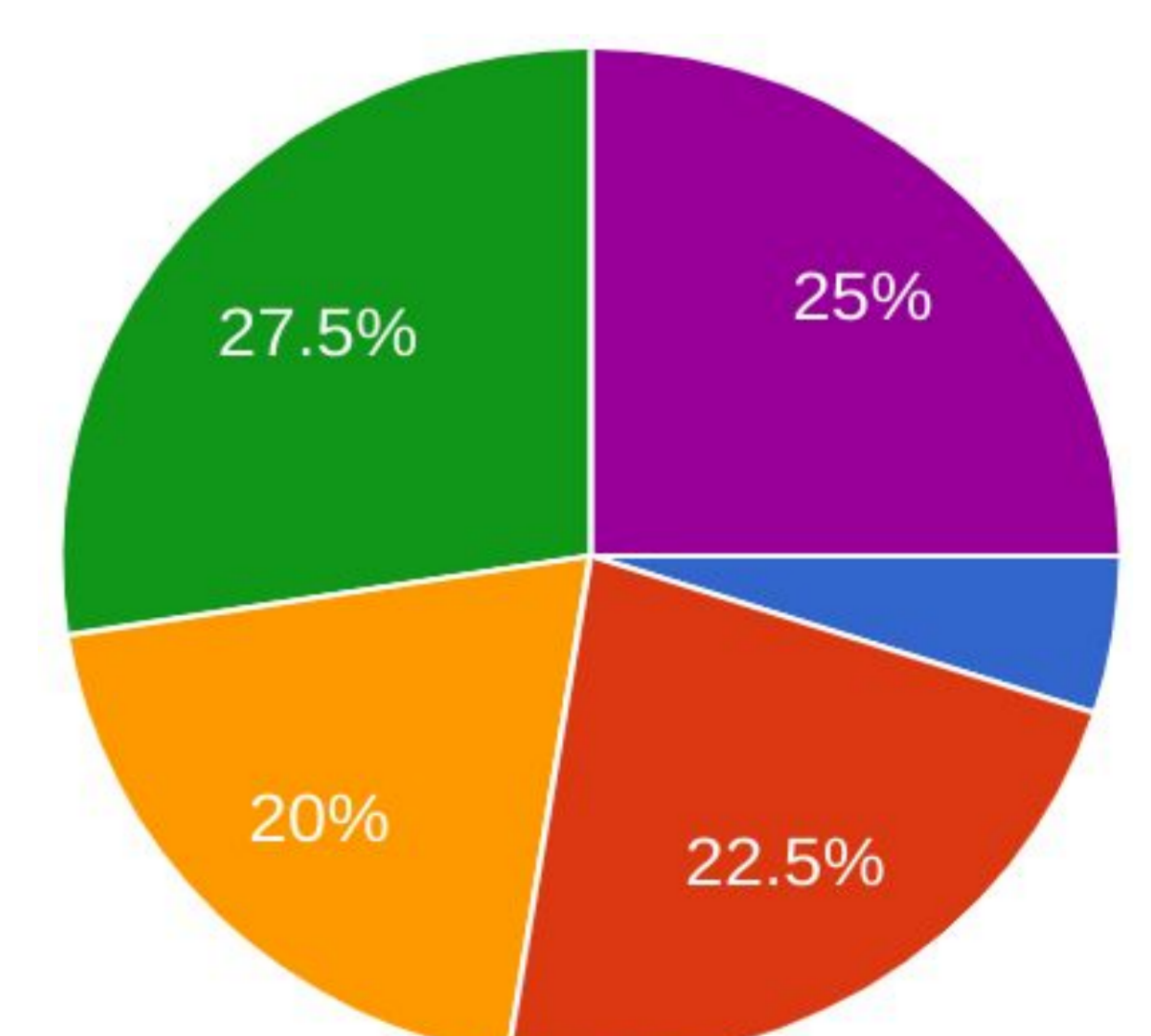
- Participants seem to be updating their resume more often than their online profiles on websites like LinkedIn, Handshake, etc.
- Participants think that using online profiles to apply for jobs is more convenient and accurate.
- There would not be a parsing problem with resumes.
- Participants think that having and uploading a resume is required by most companies. Hence resumes can not be replaced with online profiles.

- Every 2 weeks
- Every month
- Every 2-3 months
- Every 3-6 months
- Every 6-9 months
- Once a year
- Don't update for couple years

Online Profile Update



Resume Update



Future Work

- Get the companies' opinion about online profiles and analyze why they still stick to resumes.
- How can we make the process of job application more efficient without worrying about resume parsing issues and bias/procedural justice/etc.