

An Analysis and Evaluation of the Design Space for Online Job Hunting and Recruitment Software

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SSHRC  CRSH

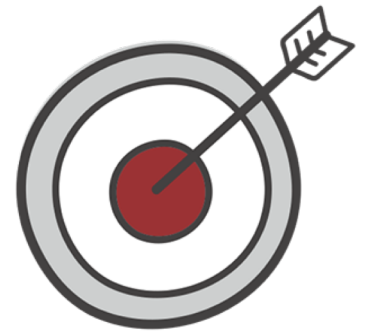


Motivation

- Job seekers face difficulties in finding suitable work
 - Lack of skills, confidence, domain knowledge
- Job providers face difficulties in finding suitable employees
 - Unable to compare range of technical qualifications
 - Mismatch of company fit
- Online job boards do not support user needs
 - No ability for job providers and job seekers to interact
 - Job seekers cannot learn from each other
 - Job providers cannot personalize their job postings

Want a better way to connect job seekers with job providers

Our Research Goals



- To better understand how **youth** job seekers search for jobs
- To better understand how **small businesses** look for the right candidates

Design Research

- Participatory design with job seekers
 - Brainstorming
 - Card sorting
 - Paper prototyping
- Participatory design with job providers
 - Brainstorming
 - Card sorting
 - Interface evaluation



Summary of Features: Job Seekers

User Profile	Job Search	Social Media and Networking
<ul style="list-style-type: none"> - Personal information - Résumé upload - Cover letter upload - Résumé layout tool - Messages inbox - Calendar - Notifications - Job assessment (survey) - References 	<ul style="list-style-type: none"> - Search by profession, keyword, skill, location, experience required, education required - Specific business - Current employees - Specific people - Immediate needs - Ranking saved items - Prioritizing search results 	<ul style="list-style-type: none"> - Stay updated - See what others are doing - See who is working there - Keep you connected to the community - Like button - Instant message with others - Integration with other apps - Video chat - Emotes
Resources	Job Consideration	
<ul style="list-style-type: none"> - Ongoing training - Accommodations search - Sample résumés - Sample cover letters - Tips for landing a job - Current affairs - Tips of the day - Volunteer opportunities - Career paths 	<ul style="list-style-type: none"> - Job application (individual) - Mass job application - Featured jobs - Identify top 5 skills to fit needs - Way to contact manager or previous employees in your network - View comments about job from previous employees - View comments about business from previous employees 	

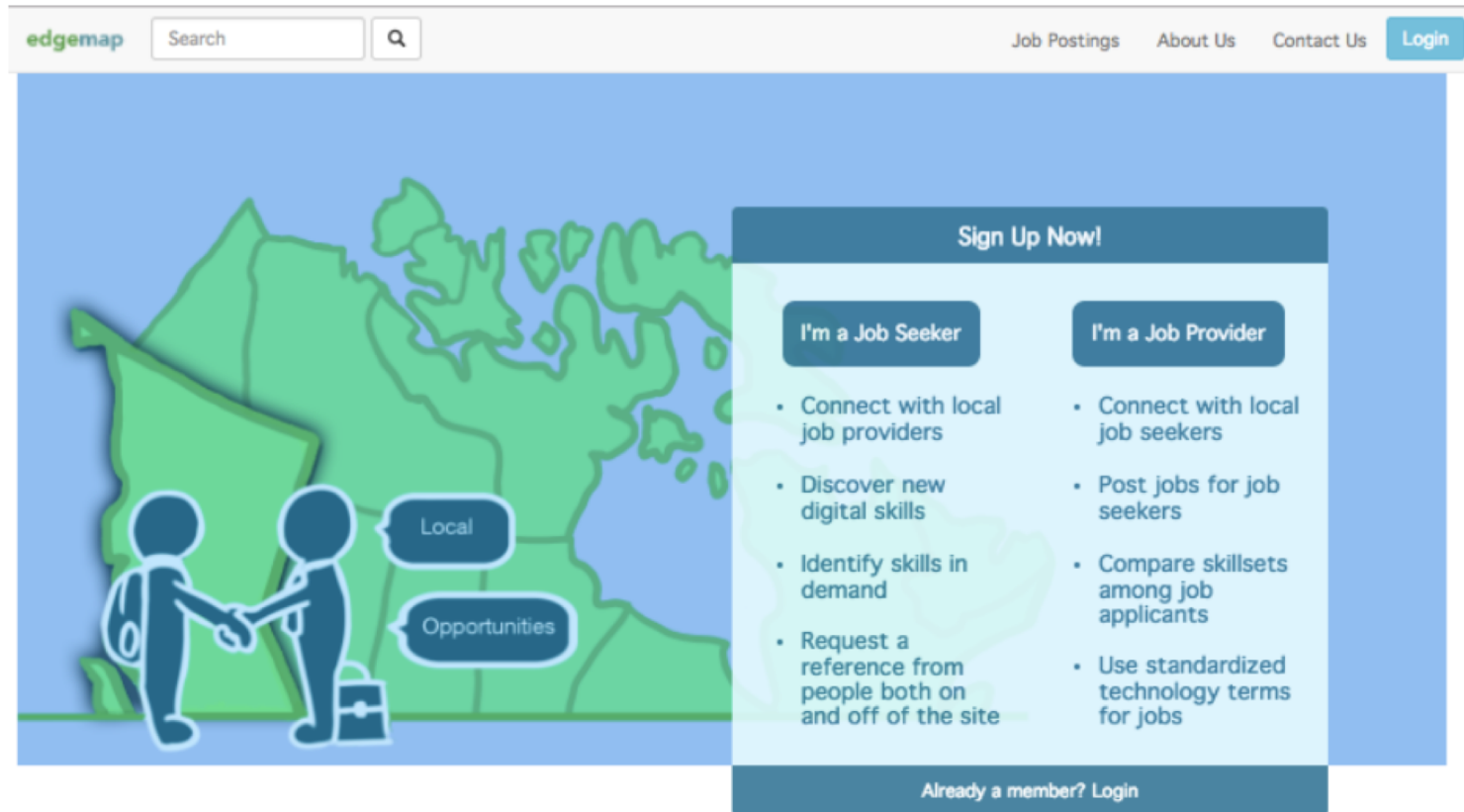
Implications on Design Space

- Not just a job board
- Online social networking is second nature (~2014)
- Interaction, feedback, early indication
- Resources, training, supporting functions
- Categories of features were the same between job seekers and job providers

Holistic view of job search and recruitment process

EdgeMap: A Minimal Viable Prototype

<http://edgemap.ok.ubc.ca/>



Tips for Job Seekers

- Recommended Reading - Tips for first job
- Recommended Reading - Common interview questions
- Recommended Reading - Tips for a cover letter
- Recommended Reading - Prepare for the interview
- Recommended Reading - Interview tips

Tips for Job Providers

- Recommended Reading - Tips for Millennials in the workspace
- Recommended Reading - Millennial traits
- Recommended Reading - What Millennials want
- Recommended Reading - Motivating employees
- Recommended Reading - Employee retention

System Announcements

- Friday, June 02: Edgemap is now posted on Kelowna Community Resources (KCR) website!
- Monday, May 8th - 8:00am: New, more responsive site!
- Wednesday, March 29: Edgemap is now posted on UBC's Regional Employer Links!
- Friday, March 24, 11:30am: Server maintenance completed, site is back up and job postings with search is working
- Check out our Facebook page at <https://www.facebook.com/EdgeMapJobs/>

EdgeMap Features

- Job Seeker Features
 - User profile
 - Online portfolio
 - Request testimonials
 - Complete skills survey
 - Browse community
 - Review job/company ratings
 - Search for jobs
 - Apply for jobs
- Job Provider Features
 - Company profile
 - Add job posting
 - Identify skills for ideal candidate
 - Manage job postings
 - Compare applicant skills
 - Contact other users
 - Make hiring decision

Job Seeker's Skills Profile

edgemap



Thanks for answering the survey!



Carrie Chapman

Kelowna, BC

Graduating student looking for full-time job.

SKILL SURVEYS

SKILLS

JOB APPLICATIONS

PROJECTS

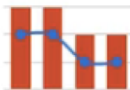
REFERENCES

Skill Survey Graphs

Click on one of the boxes below to fill out a survey to showcase some of your skills. Each graph shows the skills that an average person has (in blue) and the skills you've indicated (in red).



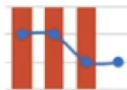
General Computing



Update

Word Processing

Internet and Networks



Update

Spreadsheet

Programming



Update

Online Communication

Skills Questionnaire: Word Processing

Category: Word Processing

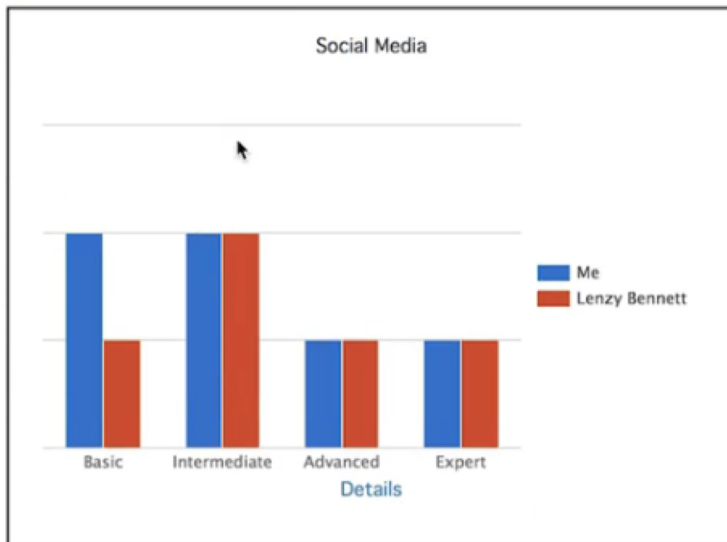
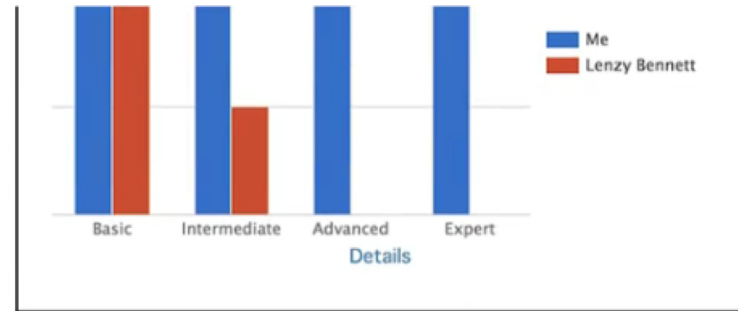
[Go back to My Profile](#)



	I don't know how to do any of these	For a few of these, I can do them well	For about half of these, I can do them well	For most or all of these, I can do them well
Basic <ul style="list-style-type: none"> Open a new document Edit a document Save a document Cut/copy/paste content Close a document Switch to another opened document Zoom in and out 	○	○	○	●
Intermediate <ul style="list-style-type: none"> Create section headings Create title pages and table of contents Adjust text stylizations and spacing Create bullet lists Create tables Insert images 	○	○	○	●
Advanced <ul style="list-style-type: none"> Use a template Modify paragraph spacing Set document margins Change page orientation Add header and footer content Add captions to images and tables 	○	○	●	○
Expert <ul style="list-style-type: none"> Spell check the document Grammar check the document Check word count of highlighted text Add comments to a document Use "review mode" to highlight contributions made by different users 	○	●	○	○

Submit

Comparing Alternative Career Paths



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada



Pre-Assessment/Increase Confidence in Job Application



1000 Harvey Ave.
Kelowna BC V1V 1V1
hugh@mcguire.com
[Linkedin](#) [Twitter](#) [Facebook](#)

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hugh@mcguire.com

[Linkedin](#) [Twitter](#) [Facebook](#)

We are looking for someone to host our Social Media accounts.

IDEAL CANDIDATE	SOCIAL MEDIA MANAGER	ABOUT US	JOB
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Category: Social Media



There are 4 skill levels: Basic, Intermediate, Advanced, and Expert. Each level has a list of skills associated with it. Users rate themselves based on how well they know each group of skills: None of the skills, a few of the skills, half of the skills, or most/all of the skills.

Basic

- Read posts
- Follow others
- Subscribe to groups and forums
- Like/favourite content

Intermediate

- Check news updates
- Create social media accounts
- Update account
- Participate in online question

Advanced

- Solicit user feedback
- Develop text content for social media
- Develop images/video content

Expert

- Moderate forums and discussions
- Incorporate social media as part of a larger campaign
- Develop social media plan



Job Provider's View of Applicants

Job Applications for Social Media Specialist

Here, you can view all the job seekers who applied, along with a summary of their skills that match your job description's required and preferred skills. For example, a required skill with a checkmark means that the job seeker has that skill. On the otherhand, a required skill with a cross, means that the job seeker is missing the skill. Once you have decided on the outcome of the application, you can reject, consider, or accept it, so that the job seeker will be notified of your decision.

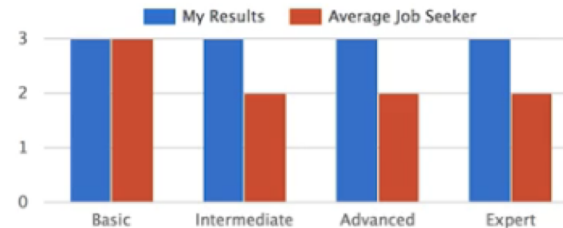
You may also wish to compare the job seekers' skills visually in a graph form.

[Compare Applicant Skills](#)

Applicant	Required Skills	Preferred Skills	Status	Actions
 Jacob Brown See more.	<ul style="list-style-type: none">✗ Analyze Social Media Environments✗ Develop Social Media Content✗ Develop Social Media Strategies✗ Manage Social Media Content Across Various Channels✗ Facebook, Twitter, Flickr, Youtube, Linkedin, Google Hangout✓ Communication✗ Networking✗ Social Media Best Practices and Trends✗ Develop/coordinate Products/activities On Various Channels	<ul style="list-style-type: none">✗ Infographics✗ Powerpoint✗ Bilingualism✓ Communication	Considering	View Profile Reject Consider Accept
 Noah Smith See more.	<ul style="list-style-type: none">✗ Analyze Social Media Environments✗ Develop Social Media Content✗ Develop Social Media Strategies✗ Manage Social Media Content Across Various Channels✗ Facebook, Twitter, Flickr, Youtube, Linkedin, Google Hangout✗ Communication✗ Networking✗ Social Media Best Practices and Trends✗ Develop/coordinate Products/activities On Various Channels	<ul style="list-style-type: none">✗ Infographics✗ Powerpoint✗ Bilingualism✗ Communication	Considering	View Profile Reject Consider Accept

Skills in Context

Category: Programming



	I dont know how to do any of these	For a few of these I can do them well	For about half of these, I can do them well	For most or all of these, I can do them well
Basic <ul style="list-style-type: none"> • Use tools and templates to create websites • Modify basic HTML code or code in other markup languages • Modify simple CSS elements • Understand basic concepts in computer programming 	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Intermediate <ul style="list-style-type: none"> • Build simple websites from scratch • Write and test programs to do mathematical calculations • Write and test programs that read from and write to files • Write and test programs that use elementary data structures such as arrays and linked lists 	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Advanced <ul style="list-style-type: none"> • Write and test programs that use complex data structures such as hash maps and trees • Write and test programs that have a graphical user interface • Write and test simple apps for mobile devices • Measure programs for performance 	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

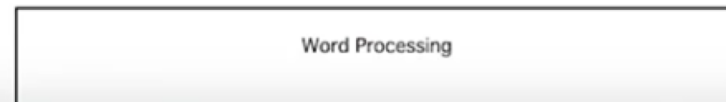
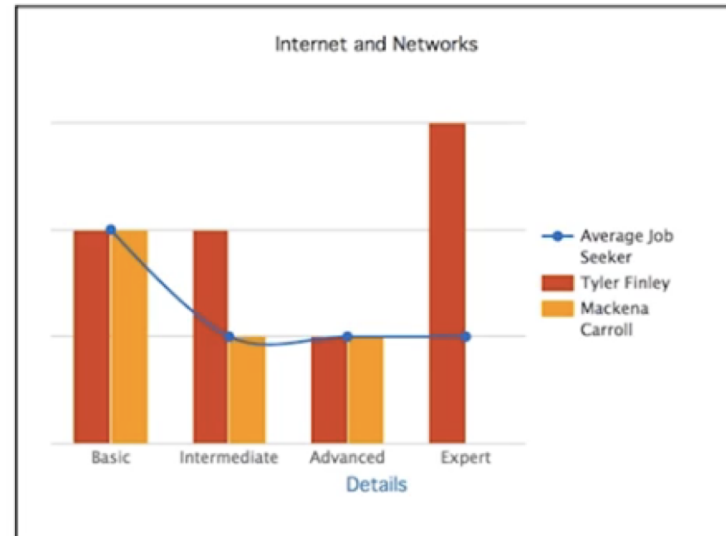
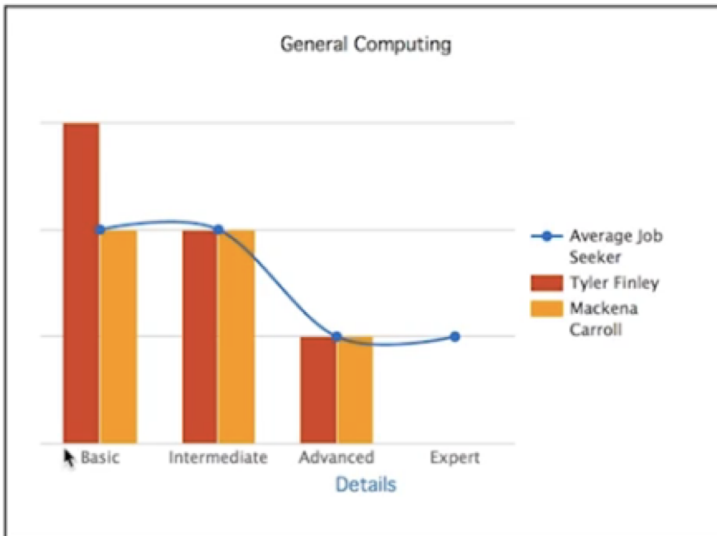
Compare Multiple Applicants

[ABOUT US](#)

[JOBS](#)

Applicant Overall Skill Comparison for [Social Media Manager](#)

Below are the 12 skill graphs. Each user, that has completed the surveys, has their results displayed. If they have not completed the survey, they are not displayed on the graph. In addition, the average Edge Map job seeker is displayed in blue.



Usability Study

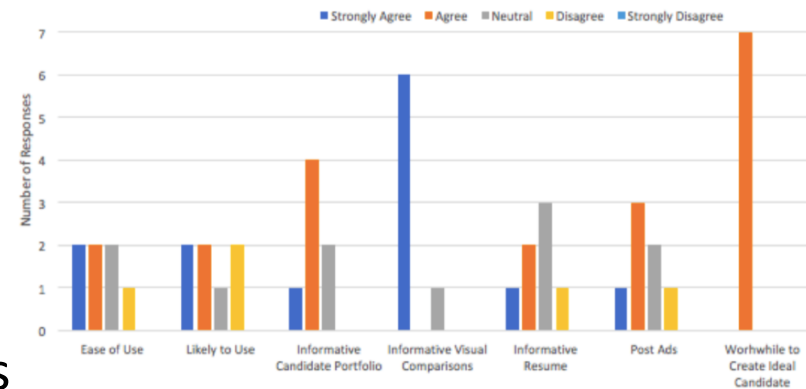
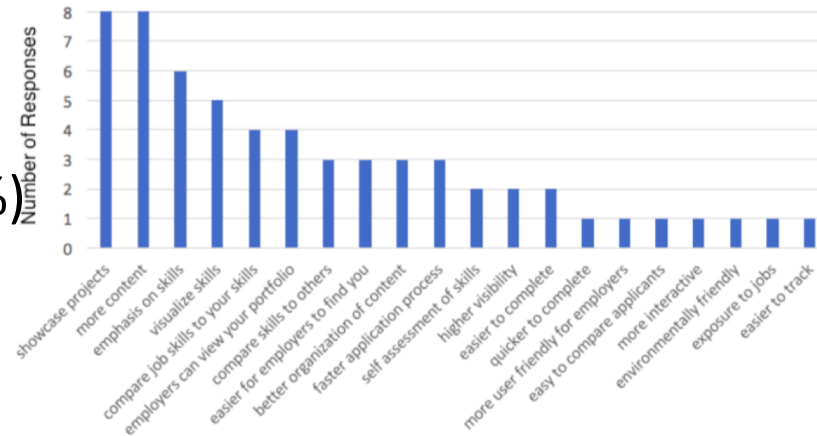


- Youth participants as job seekers
 - 45 university students (21 F, 24 M; 75% were 18-20 years old)
 - Tasks: create account, complete user profile, add 5 projects, upload résumé, browse for jobs, determine if they are qualified for jobs, browse others and compare against their skills
 - Complete post-questionnaire
- Business participants as job providers
 - 7 business owners/managers (2 F, 5 M; mostly with employees under 35 years old)
 - Tasks: technology attitude survey, create account, post 2 job ads, evaluate 5 applicants for 2 fictitious jobs
 - Complete post-questionnaire

Results

- Youth participants:
 - Easy to use (77.8%)
 - Would use for self-promotion (53%)
 - Would use for job hunting (51%)
 - Better than paper résumé (42%)

- Business participants:
 - Easy to use (4/7)
 - Would use for recruitment (4/7)
 - Informative and helpful (5/7)
 - Better visuals (6/7)
 - Reviewed résumés and skills graphs (100%)
 - Worthwhile to create ideal candidate (100%)



Future Work



WHAT'S
NEXT?

- Main finding: software needs to support the whole job hunting and recruitment process
 - Online social networking is expected
 - Skill comparisons can improve job seeker confidence, help with career planning, support hiring decision making
- Caveat: Available user base
 - Would only adopt if there are a lot of job seeker users
 - Would only use if there are a lot of job postings
- Future feature: Customizable skills survey
 - Include additional skills surveys
 - Allow individual users to customize relevance