

**JOB SEEKER  
OF**

**CYBER  
INFOSEC**

# DISCLAIMER



Opinions are my own and not the views of my employer.  
This material is not an ultimate guide, use with your own caution.

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A quick tale of  
@tas\_kmanager

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## **JOB HUNT**

From start to the end

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**02**

## **WHAT IS A JOB?**

Seriously what is it?  
What about a perfect job?

**04**

## **INTERVIEW**

What is your ...?  
Tell me when ...?

# 01

# INTRO

A quick tale of @tas\_kmanager

A black and white photograph of a person standing in a dark, starry night sky, holding a large, glowing, translucent map or document. The person is silhouetted against the bright, starry background. The map they are holding is illuminated from within, showing some details. The overall scene is dark and atmospheric, with the Milky Way visible in the background.

# TAS

@TAS\_KMANAGER



/IN/TONDANGMANGATAS



Senior Consultant, Big 4

~4 Years Professional Career in Infosec

Sheridan College Alumni

Information Systems Security

# CAREER



**2017**

**All Around Security**

Health Tech Co.

\*co-op



**2017**

**Application Security**

Major Insurance Co.

\*co-op



**2018**

**Threat Hunting**

Major Telco Co.



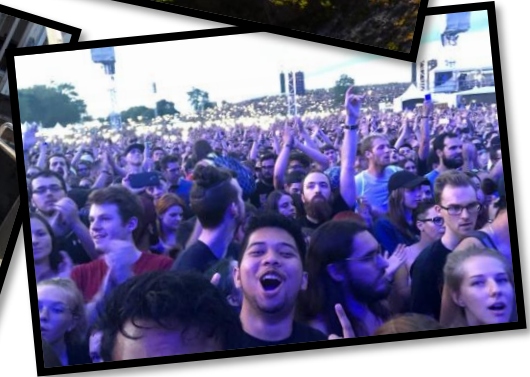
**2020**

**Managed Detection & Response**

Big 4 Consulting Co.

**CAREER**

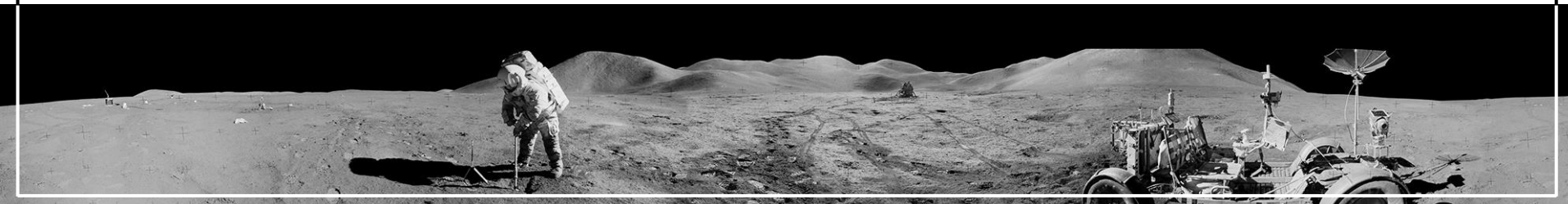
# MY HOBBY





**HOW HARD CAN IT BE**

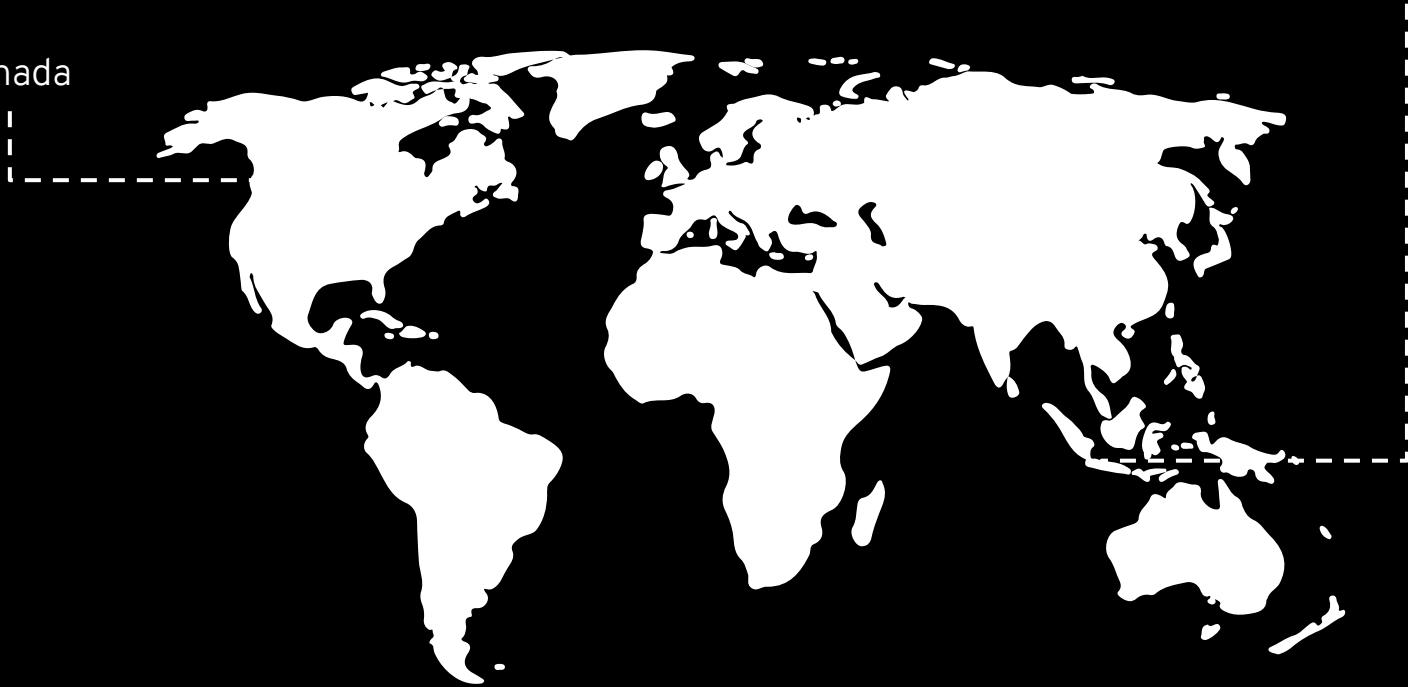
**TO FIND THE FIRST INFOSEC JOB ?**

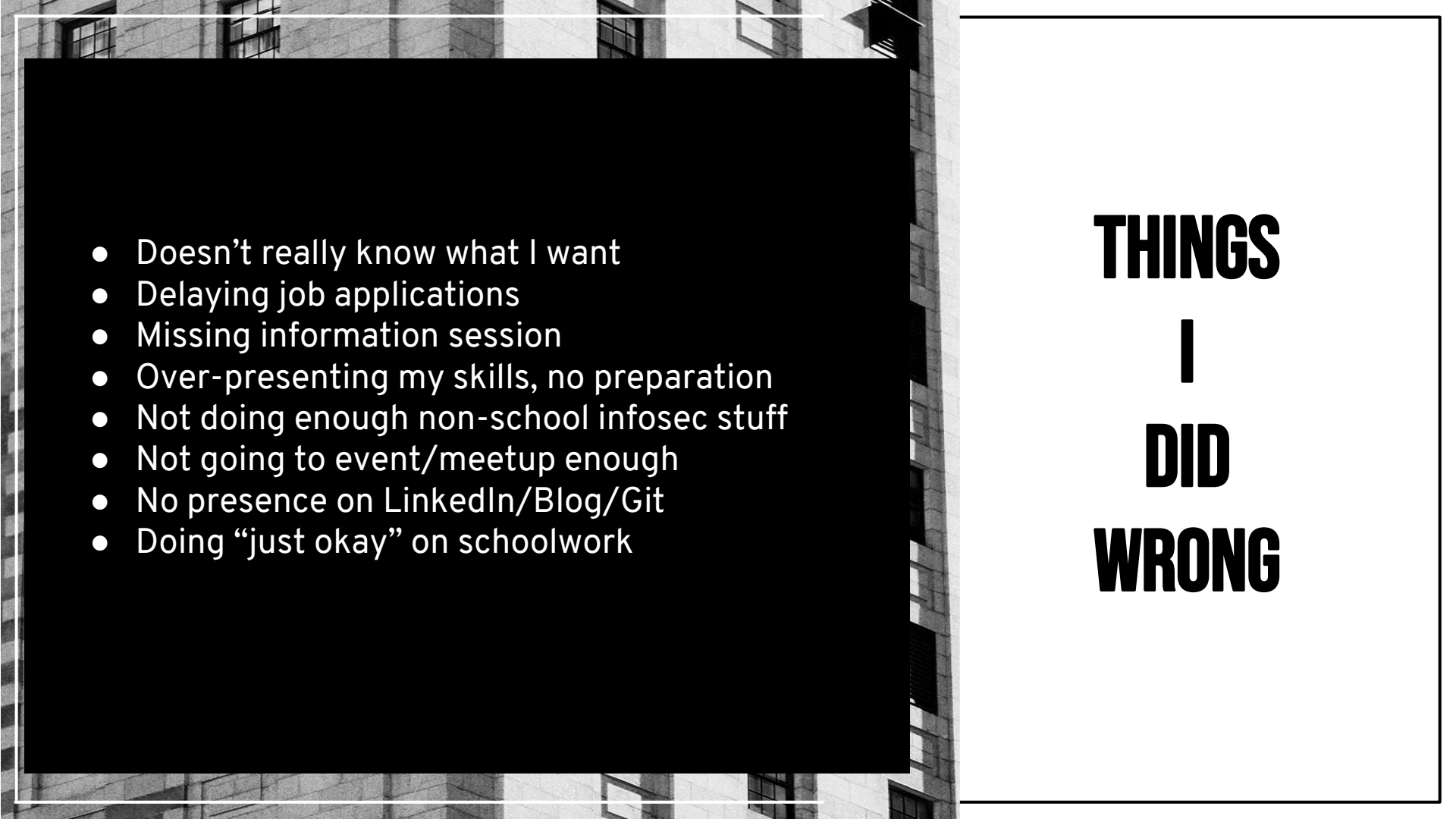


**FOR ME? IT WAS PRETTY HARD ☹️**

Canada

Indonesia



- 
- Doesn't really know what I want
  - Delaying job applications
  - Missing information session
  - Over-presenting my skills, no preparation
  - Not doing enough non-school infosec stuff
  - Not going to event/meetup enough
  - No presence on LinkedIn/Blog/Git
  - Doing “just okay” on schoolwork

**THINGS  
I  
DID  
WRONG**

# 02

## WHAT IS A JOB?

Seriously what is it?  
What about a perfect job?

# YOUR JOB EQUALS TO...



## POSITION

Type of Position  
Job Description  
Tips & Trick



## COMPANY

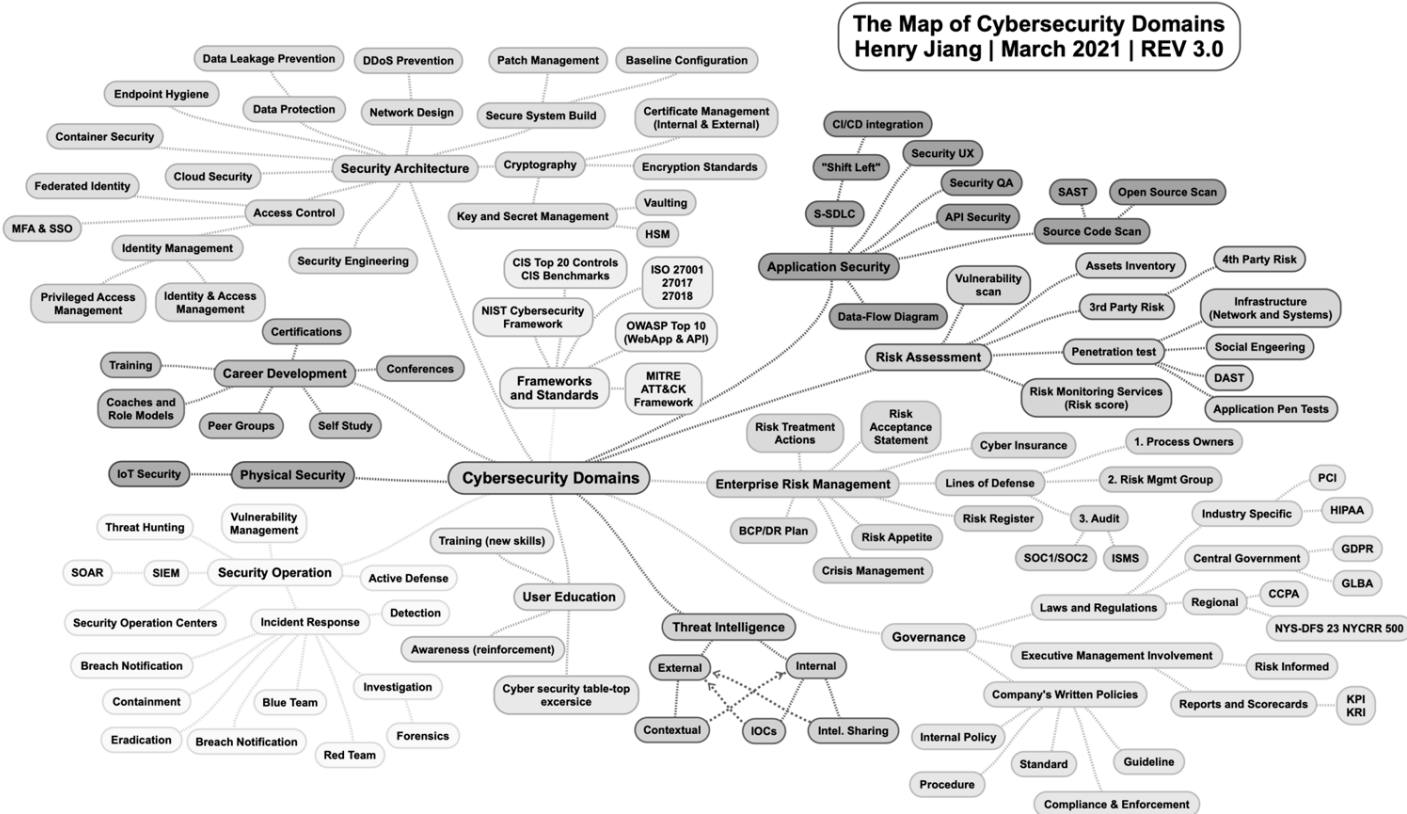
Type of Infosec companies  
Money? Benefit? Others?  
Tips & Trick



## YOURSELF

Your Skills  
Resume  
Putting yourself out there

# POSITIONS



## Offensive Operation

- Red Team Operator
- Penetration Tester
- Physical Penetration Tester
- Mobile Penetration Tester
- Offensive Security Engineer
- Offensive Security Specialist
- Ethical Hacker
- Bug Bounty Hunter (often called Security Researcher)

## Vulnerability Management

- Vulnerability Management
- Vulnerability Assessment
- Vulnerability Engineer

## Purple Team

- Adversarial Simulation
- Purple Team Engineer
- ATT&CK Assessment

## Research & Development

- Security Researcher
- Vulnerability Researcher
- Exploit Researcher
- Exploit Development
- Offensive Security Researcher
- Offensive Security Engineer
- Security R&D Engineer

# COMMON OFFENSIVE INFOSEC POSITIONS

## Monitoring

- Security Analyst
- Threat Analyst
- Triage Analyst
- Security Specialist
- SOC Analyst
- MDR Analyst

## Intelligence

- Threat Intel Analyst
- Cyber Threat Intelligence (CTI) Analyst
- Security Researcher

## Detection & Response

- Threat Hunter
- Detection Engineer
- Detection & Response Engineer
- Threat Research Engineer
- Security Researcher
- Content Development
- Security Engineer
- SIEM Architect
- SIEM Engineer
- SOAR Engineer
- Integrator
- Signature Developer
- Signature Engineer

## DFIR

- DFIR Consultant
- Forensic Analyst
- Incident Responder
- Incident Response Lead
- Incident Commander
- CIRT/CSIRT Analyst
- Malware Analyst
- Reverse Engineer

# COMMON DEFENSIVE INFOSEC POSITIONS



## Application Security & DevSecOps

- DevSecOps Consultant
- DevSecOps Engineer
- Security DevOps Engineer
- CI/CD Engineer
- Security Integration Engineer
- Solution Security Architect
- Product Security Architect
- API Security Engineer
- App Sec Engineer
- App Sec Consultant
- Software Security Engineer
- Product Security Engineer
- Secure SDLC Manager
- Software Engineer
- SAST/DAST Specialist
- Security Engineer

**COMMON  
APPSEC &  
DEVSECOPS  
INFOSEC  
POSITIONS**

## Infrastructure

- Infrastructure Security Engineer
- Platform Security Engineer
- Container Security Specialist
- Security Architect
- Cloud Security Architect
- Network Security Engineer
- Staff Security Engineer
- Security Data Engineer
- Security Systems Engineer

## Appliance / Technology Specialist

- IAM Specialist
- DDOS / WAF Engineer
- Firewall Engineer
- SAP Security Specialist
- Endpoint Security Engineer
- Security ML Engineer
- UEBA Engineer
- X Integration Engineer
- X Integration Consultant
- OT Security
- IoT Security

# COMMON INFRA & SPECIALIST INFOSEC POSITIONS

## Governance, Risk & Compliance

- GRC Specialist
- GRC Consultant
- Risk Management
- Security Audit
- Security Officer
- Compliance and Audit Manager
- Technology Risk Consultant
- Information Risk Specialist
- IT Risk Specialist
- Security Policy and Standard
- Privacy Officer
- Strategic Consulting
- Security Strategy

## Program / Project Manager

- Technical Program Manager
- Program Manager
- Delivery Manager
- Project Manager
- Product Manager – Security
- Account Manager
- Security Product Owner
- Security Transformation Manager
- Security Services Program Manager
- Agile Specialist
- Scrum Master

# COMMON GRC & PM INFOSEC POSITIONS

Lesley Carhart's Blog:

<https://tisiphone.net/2015/11/08/starting-an-infosec-career-the-megamix-chapters-4-5/>

John Simpson's

“The Wonderful World of Information Security 2021”:

<https://docs.google.com/presentation/d/1kD6TdAq6c2pB6PYxhiEH0lIVjj6ZZ-9M/edit#slide=id.p7>

**GREAT  
RESOURCES!**

## Entry Level Position

Look for role with these terms:

Junior / Jr.  
Entry Level  
Associate  
Graduate  
New Graduate  
Graduate Program  
Early  
L1 / Level 1  
T1 / Tier 1  
Triage  
Analyst

## Co-op Position

Look for role with these terms:

Co-op  
Intern  
Internship  
Trainee  
Apprentice (UK)  
Placement  
Working Student  
Winter/Summer/Fall 2022

# STARTING UP

# THINGS TO DO

- Know the positions you want, rank them if needed
- Talk to people with these positions e.g., via LinkedIn, Chat Group, or Meetup to understand more about the role
- Go through job posting to familiarize with job description
- Understand the skillset required for each positions
- Match your skillset with your dream job

I DIDN'T KNOW THAT  
**COMPANY**  
IS DOING INFOSEC



## General Consulting

- EY
- Deloitte
- PwC
- KPMG
- Accenture
- MNP
- Avanade
- CGI
- Grant Thornton
- Thomson Reuters
- CDW
- Synopsys
- Thales
- BDO
- Capgemini

## Security Consulting

- Mandiant
- CrowdStrike
- Blackberry
- Security Compass
- Lyrical Security
- A2N
- Lookout
- Lares
- Herjavec
- Hashicorp
- Arctic Wolf
- eSentire
- GoSecure
- NCC Group
- Cisco Talos
- ISA
- Cytelligence
- Difenda
- Sirius

# CONSULTING COMPANIES



## In House

- TD
- Scotiabank
- RBC
- National Bank
- BMO
- CIBC
- Desjardins
- Bell
- Rogers
- Telus
- Loblaw
- Manulife
- Sunlife
- Canada Life
- Canadian Tire
- Morgan Stanley
- Moneris
- Questrade
- Air Canada
- Westjet

- AllState
- Coinbase
- Unity
- Ubisoft
- League
- PointClickCare
- Lifelabs
- Enbridge
- McCain Foods
- Mercedes-Benz
- TMX Group
- Federal Government Agencies
- Provincial Government Agencies

## Tech Vendor

- Google
- Microsoft
- Amazon
- AWS
- Facebook
- Dropbox
- Cisco
- Apple
- IBM
- Hitachi
- Blackberry
- Elastic
- OpenText
- Trend Micro
- Rapid7
- Cybereason
- Sophos
- Fortinet

# IN HOUSE & TECH VENDOR COMPANIES

### **Financial**

Money/Mula/Bag/Cash/\$\$\$  
Stock options  
RRSP contribution  
Bonus (complicated or not ?)

### **Benefit**

Health  
Fitness  
Family/Dependents

### **Flexibility**

Work from Home? Anywhere?  
Work at anytime  
Hands-off Management

### **People & Culture**

Vision and Goals  
Community contribution  
Infosec “Public Figure”  
Tight knit group  
Working arrangement  
Team activities

### **Growth**

Training allowance  
Time off for training  
Conference/CTF  
Non-Infosec training  
Mentorship

**REASONS  
TO  
PICK  
A  
COMPANY**

# THINGS TO DO

- Learn about the company, follow them in the news
- Understand the culture of the company
- Know why you “like” this company
- Talk to people in these companies e.g., via LinkedIn, Chat Group, or Meetup to understand more about the role
- Interact with their recruiter to get more insider insights

KNOWING  
**YOURSELF**  
IS IMPORTANT



# SKILLSET

## Offense

- Attack Kill Chain
- OSINT
- Windows, Mac, and Unix internals
- Offensive security tooling (Bloodhound, NMAP, Meterpreter, C2 framework, etc.)
- CTF experience
- Exploit Development
- Programming
- Scripting
- Networking
- Social Engineering
- Reporting

## Defense/DFIR

- Critical Thinking
- Intrusion Analysis
- Log Analysis
- Forensic
- Windows, Mac, and Unix internals
- Cloud
- Networking
- SIEM familiarity
- AV/EDR operation
- Programming
- Scripting
- Reporting
- Communication
- Threat Mgmt.
- Sysadmin
- CLI
- Signature Building (YARA, Snort, etc.)

## AppSec/Infra/Specialist

- Programming
- Instrumentation (Chef, Puppet, Ansible, etc.)
- Container, Docker, Kubernetes
- Database or Big Data
- Cloud environments
- OWASP
- Secure Coding
- QA Test
- SAST/DAST
- SDLC
- CI/CD
- Vendor Specific Tool

## GRC

- GRC Platforms
- IT Risk Mgmt.
- Audit
- Policy Mgmt.
- Risk Assessment
- Metric
- Data Analytics
- Industry Standards (CobIT, ISO, PCI DSS)
- Government Regulation (GDPR)
- Presentation
- Reporting
- Attention to Details

# RESUME

**CONTACT INFORMATION**

**SUMMARY**

**EDUCATION**

**EXPERIENCE**

**SKILLS**

**ADDITIONAL INFO:**

**COMMUNITY INVOLVEMENT**

**HOBBIES**

**VOLUNTEER EXPERIENCE**

**PUBLICATIONS**

- Keep it short (2 pages max), concise and simple
- Tailored towards the position job description, try to add the keywords to pass the HR filter
- Add data to your story; 3x faster, 25% less cost, etc.
- Explain your experience thoroughly, sometimes small details can cause big impacts
- Focus on I (what you are doing) not we
- Write cover letter, when possible
- Include LinkedIn, GitHub or professional/research website
- Maximize white space, but still leave some for “sectioning”
- Use professional email and contact information
- Follow the file format requirement (e.g., if they accept PDF)
- Keep the “paste-able” information ready to use for filling application form
- Ask for peer review from professor, career advisor or friend/family

# MANGATAS TONDANG

THREAT HUNTING AND DETECTION ENGINEERING

Mississauga, Canada | +1 [REDACTED] [REDACTED]

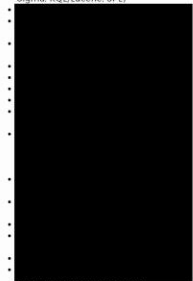
## PROFESSIONAL SKILLS

- Threat Hunting Operation
- Threat Intelligence Operation
- Offensive Tools Emulation



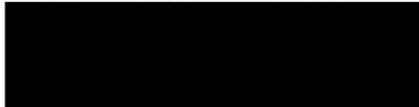
## TECHNOLOGY EXPERIENCE

- Scripting (Python, PowerShell, Bash, Batch, Jupyter Notebook)
- Programming (Java and C)
- Pattern Matching (Regex, YARA, Snort, Sigma, KQL/Lucene, SPL)



## SUMMARY

Mangatas is a CompTIA Security+ certified with 3+ years professional experience mainly in Threat Hunting, Threat Intelligence, and Incident Response powered by

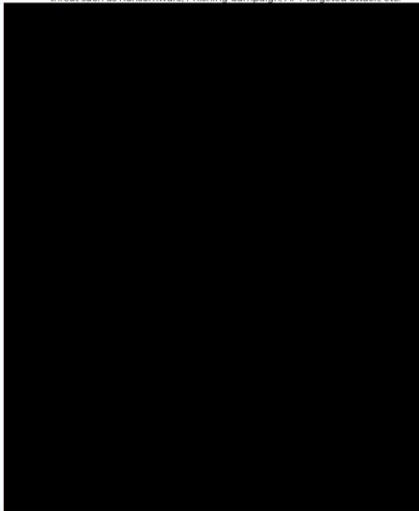


## WORK EXPERIENCE

### SENIOR CONSULTANT, MANAGED DETECTION AND RESPONSE (MDR)

Ernst & Young (EY) - Toronto, Canada | Nov 2020 - Now

- Lead Incident Response procedure in client environment (from planning all the way to the post-incident activity such as reflection and reporting) against threat such as Ransomware, Phishing Campaign, APT targeted attack, etc.



# MANGATAS TONDANG

THREAT HUNTING AND DETECTION ENGINEERING

Mississauga, Canada | [REDACTED] [REDACTED]

## COMMUNITY ACTIVITIES

- Sheridan College ISSessions
  - Member
  - Guest Speaker
  - CTF Challenge Developer
- HackFest Conf. (Quebec City)
  - Conf. Presenter - 2019



## CERTIFICATIONS AND COURSES

- CompTIA - Security+
- MITRE ATT&CK Defender Cert.
  - SOC Assessment



## CONTACT

Cell:



Email:



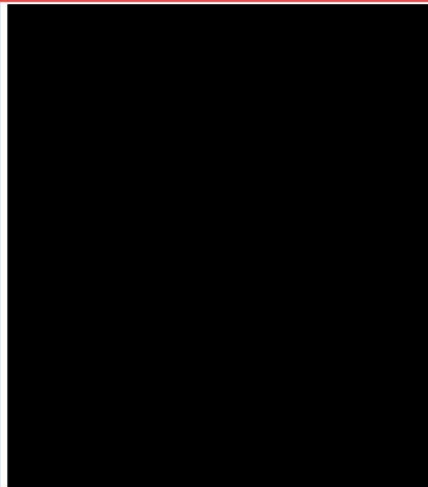
LinkedIn:

[linkedin.com/in/hondangmangatas/](https://www.linkedin.com/in/hondangmangatas/)

GitHub:

[github.com/hse-kmangatas/](https://github.com/hse-kmangatas/)

\*presentation slides can be found here



## EDUCATION

### BACHELOR OF APPLIED INFORMATION SCIENCES (BAISC)

#### INFORMATION SYSTEMS SECURITY

Sheridan College | Sep 2014 - Aug 2018

## PRESENTATION

### DETECTING THE NOT POWERSHELL GANG

DEF CON Blue Team Village | 2020

Hackfest Quebec City | 2019

### HUNTING IMMATURITY MODEL

SANS Threat Hunting and Incident Response Summit | 2020

### CFP 101

Cyber Defender Indonesia Webcast | 2020

### HOW TO UNATT&CK YOUR ATT&CK PROGRAM

EU ATT&CK Community | 2020

### THREAT HUNTING USING AZURE AD REPORT - AZULA TOOL RELEASE

SANS Blue Team Summit | 2021

SECTOR | 2021

TexasCyberSummit | 2021

# MY RESUME ?

## Offense

- Join offensive community (Bloodhound Gang, Red Team Village, etc.)
- Participate in local Conference and CTF (Hackfest, NSEC, SheridanCTF)
- Do OverTheWire, TryHackMe, HackTheBox online CTF
- Build home lab and deploy offensive security tools (Caldera, C2 Framework, etc.)
- Read offensive security books (RTFM, Hacking art of exploitation, etc.)
- Build your own tool (C2, Recon tool, etc.)

## Defense

- Join defensive community (TrustedSec, BHIS, OTR, etc.)
- Participate in local Conference and CTF (C3X, SheridanCTF)
- Do CyberDefenders and BlueTeamLabs online CTF
- Build home lab and deploy defensive security tools (SIEM, Firewall, Sysmon)
- Read defensive security books (BTfM, Practical Malware Analysis, etc.)
- Getting familiar with the tools (Debugger, Decompiler, Memory Forensic tools)

# LEVEL UP



# LEVEL UP CONT.

## AppSec

- Learn about Container technology
- Learn about Cloud technology
- Try Leet Code and code more (display it in Github)
- Understand and apply Git Hygiene
- Deploy infra tools in your home lab (Deploying set of servers with Ansible, etc.)
- Dig deeper on OWASP and CVE
- Join Infrastructure/AppSec community (Tools specific, OWASP chapters, etc.)
- Code even more 😊
- Familiarize with SDLC and Agility concept

**03**

# **JOB HUNT**

From start to the end

# PREPARATION

Learn both in school and outside

Know what you want and what you don't want!

Prepare the 3 components of a job; position, company and yourself

- Position: several position you want or based on the types
- Company: your target companies that will fit you well
- Yourself: Updated & reviewed resume, with matching skillset

## Utilize Professional Social Media

Setup job alerts on these sites:

LinkedIn  
Glassdoor  
Indeed

Combine the search terms on  
the position section

Interact (respectfully) with the  
employees

## Being Strategic

Keep an excel sheet to keep  
track of found application with  
these information

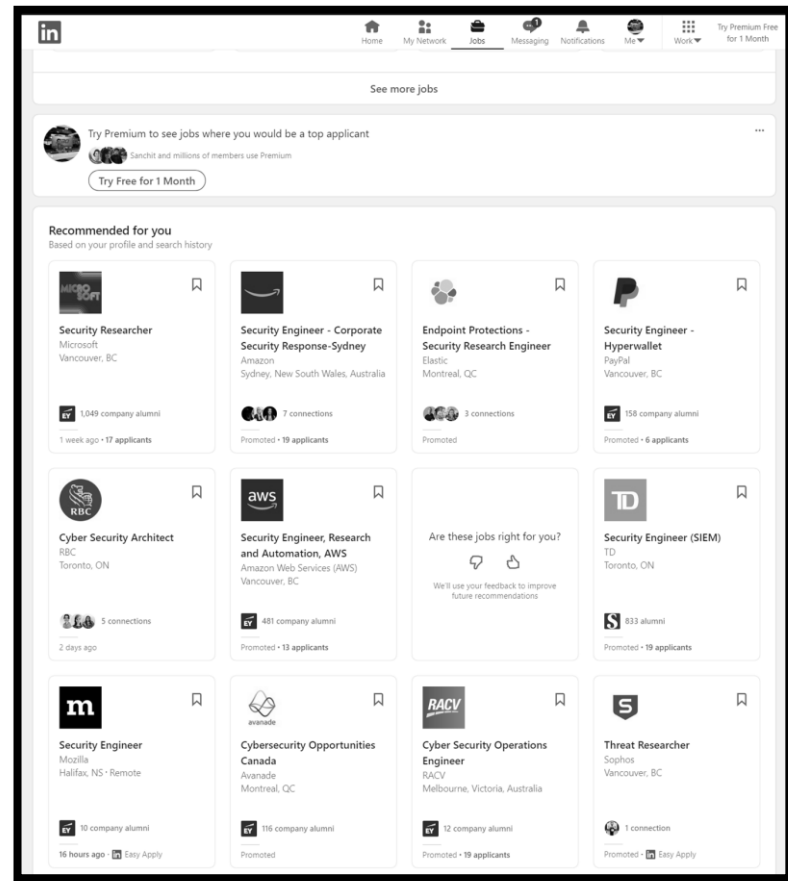
Position  
Company  
Closing Date  
Link to Job Posting  
Contact Point  
Reference Material  
Ranking  
Notes

**Internal Sheridan Job site is always a good source**

# SEARCHING

## Let the Algorithm do the job!

- Create multiple job alert
- Algorithm will learn over time
- Recommendation will start coming
- You can even “save” jobs you are interested in on LinkedIn



# APPLYING

- Update your Excel tracker with application date
- Apply only to company you want to work in (or at least interviewed with)
- Utilize the “paste-able” information when doing the online application
- Tailor resume as needed, sometimes they’ll also ask for Cover Letter or Letter of Motivation
- Remember to contact or ask for reference if you have one

## **Learn skills that you are missing**

There will always be a free option  
Update your CV (Resume) regularly, ask for feedback!

## **Practice Interview**

You can do it with friends, family, mentor or career advisor  
Look for commonly asked question both technical and behavior

## **Have fun, don't stress it out!**

Play games, go hiking, do other fun stuff!

# WAITING

# SUCCESS 😊

- Response to the interview invitation (let Co-Op office know)
- Schedule the time that works for you, account travelling time too
- Interact with the recruiter to get more insider insights or anything that is unclear about the process
- Talk to people in the company e.g., via LinkedIn, Chat Group, or Meetup to understand more about the role
- Do more practice interview!



It is okay, take this as a learning opportunity, review and find place to improve!

Don't be sad and move to the next application 😊

**FAILED** 😞

# 04

# INTERVIEW

What is your ...?  
Tell me when ...?

# COMMON INTERVIEW STEPS



01

## Introduction Call

HR or Recruiter

Introduction to the position, to see if you are a perfect fit. They will “verify” your resume with you.



02

## Technical Interview

Team Member/Senior Team Member

Digging deeper into your technical capability. Sometimes hands on (e.g., code). Could range from 1 – 5 interviews.

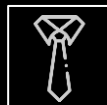


03

## Hiring Manager Interview

Hiring Manager

To see if you will be perfect fit for the team, ask question about the role, expectation, team culture, etc.



04

## Executive Interview

Director or Partner

Larger corporation started doing this, ask question about the goal of the company, company culture, or anything related to the company.



05

## Job Offer Review

Hiring Manager or HR

The meeting is to explain the terms in the job contract and to answer all your question related to that (or other left unanswered questions). Offer negotiation can happen here. Sometimes this come first before Executive interview.

# TYPE OF INTERVIEW

## **“Formality”**

Technically already got the job  
Thanks to Networking/Connections  
Ranging from 1 to 2 meetings

## **Regular**

HR -> Technical -> Hiring Manager  
followed by offer  
Ranging from 4 to 6 meetings  
Technical can be from 1 to 3 meetings

## **Technical Heavy**

A lot of technical interview, started with verbal followed with one or more hands on activity (coding, using tools, blackboard, etc.)

## **Classic FAANG**

Sometimes started with “general” Recruiter, which later connect you with specific Recruiter  
Introduction meeting with Hiring Manager  
The “Real” Interview,  
At least 1 full day  
3 to 15 different people  
At least 4 different meetings  
Touch different aspects, some behavior some technical  
They fly you to their office

# INTERVIEW TIPS & TRICK

## **STAR**

Situation, Task, Action, Result

By using this format, you will by default give the important aspect of your behavior question

## **Practice**

Practice common behavior and technical questions, role play works!

Search on Google and GitHub for common interview questions – See outro for some examples

Articulate your answers

## **Prepare Specific Scenario**

Such as projects that went well, problem with teammates, working without supervision and similar situation.

## **Ask Questions**

Interview is a 2-way communication

Company and Team culture

Day to day responsibilities

Successful candidate for the position

Management style

Performance metrics/KPI

Current goal of the team

What do you think of me so far

Training programs or budgets

How do you like the company

Talk about current news of the company

Team hangout/activity

Next steps in the interview

## **Get Ready, Even for Zoom**

Dress properly for the call, at least not in your pajamas

Dress as you are one of the employee (if in person)

## **Research**

Read the company website and news section

OSINT your interviewer to see their background, help you understand the role better too

## **Arrive early**

15 minutes for in person meeting, 5 minutes for Zoom meeting

## **Stay Calm and Focus**

Maintain eye contact, avoid looking away from camera

Pay attention to question, make sure you understand exactly what they want you to answer.

Ask them to repeat or rephrase the question if you don't understand

Take a moment of silent to think the answers instead of using filling words such as “hmm” or “uh”

## **Integrity**

It is okay to not know all the answers

Let them know if you don't know the answer and ask for the answer if possible

NEVER LIE

## **Manners**

Avoid cutting the interviewer off, especially when they are asking question or answering your questions

Don't badmouth your previous company

Respect everyone you meet

Pay attention and avoid zoning out

Smile (just enough, not too much!)

Send Thank You note (my personal view)

**05**

**OUTRO**

Closing Remarks and Q&A



# INTERVIEW RESOURCE

## **TECH BEHAVIOR QUESTIONS - GITHUB**

[tech-interview-handbook](#)

## **INFOSEC TECHNICAL QUESTION - GITHUB**

[security-prince's  
tahmed11's](#)

## **@HACKS4PANKAKES' CAREER BLOG**

[tisiphone.net](#)

## **BHIS JOB HUNTING - YT**

[youtube.com](#)

## **DANIEL MIESSLER'S CAREER BLOG**

[danielmiessler.com](#)

## **DANIEL MIESSLER'S 60 TECHNICAL QS**

[danielmiessler.com](#)

# **NEWCOMER CONFERENCES**

## **SANS NEW TO CYBER SUMMIT**

<https://www.sans.org/event/newto cyber-summit-2021>

## **PANCAKES CON**

<https://pancakescon.com/>

## **BSIDES LV – PROVING GROUND**

<https://www.bsideslv.org/proving-ground/>

# STARTING UP GUIDE

**ISSESSIONS'**  
THE WONDERFUL WORLD OF INFORMATION SECURITY

[youtube.com](https://www.youtube.com/channel/UCv3p0D8333333333333333)

**AWESOME-INFOSEC**

[awesome-infosec](https://www.youtube.com/channel/UCv3p0D8333333333333333)  
[awesome-security](https://www.youtube.com/channel/UCv3p0D8333333333333333)

**INFOSEC ADVICE TWITTER THREAD**

[twitter.com/j\\_opdenakker](https://twitter.com/j_opdenakker)

**BLACK HILLS INFOSEC YT**

[youtube.com](https://www.youtube.com/channel/UCv3p0D8333333333333333)

**DANIEL MIESSLER'S INFOSEC CAREER**

[danielmiessler.com](https://danielmiessler.com)

**@HACKS4PANKAKES' CAREERS AND  
EDUCATION RESOURCES**

[tisiphone.net](https://tisiphone.net)

# LOCAL CONFERENCES AND MEETUPS

## **SECTOR**

<https://sector.ca/>

## **TORONTO AREA SECURITY KLATCH (TASK)**

<https://task.to/>

## **BSIDES TORONTO**

<https://www.bsides.to.ca/>

## **HACKFEST (QC)**

<https://hackfest.ca/>

## **NORTHSEC (QC)**

<https://nsec.io/>

## **OWASP TORONTO**

[https://owasp.org/www  
-chapter-toronto/](https://owasp.org/www-chapter-toronto/)

# Q&A

What ?

**POSITION**

**COMPANY**

Who?

How ?

**JOB HUNT**

**INTERVIEW**

Why?

# THANKS

Do you have any questions?

@tas\_kmanager  
/in/tondangmangatas



CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon**, and infographics & images by **Freepik**.



# **SLIDEDECK & OTHER MATERIALS**

**WILL BE AVAILABLE ON MY GITHUB**

Scan barcode to visit my GitHub  
ps: not a rick roll link 😊