Joma

what's up guys! Alright, so and today what we're going to do, we are going to interview a quant. Now what is a quant? A quant is usually called a quantitative researcher or a quantitative analyst, what they do is they work for hedge funds, I think what they do is they use mathematical model of Statistics [you know], all these rigorous tools to try to predict a market or try to [you know] think about good investment strategies for hedge fund to make tons of tons of money. And why do I want to interview a quant is because it is the highest paying job, like if you come out of college and you go straight to a quant you can get up to like starting salary like $200,000. And also that's not even what's most appealing about it, it's the bonuses, now the bonuses they can go up to like half a mil, [you know] it's not a surprise that after you worked there for four years you might get a total compensation of a million dollars a year. So we are going to interview a quant and also this is a

little bit special because this quant is my brother. So yeah I hope you enjoy the interview.

Joma

Welcome to the Joma show. It's not called “Don't show anymore” because now I'm doing vlogs, but I know it hasn't been a while since I've done an interview. And today we have a special guest: David Ma, so he is a special person highly requested because he used to work as a quant at 2 Sigma. Is that correct?

David Ma

that's correct.

Joma

That is cool!

So a little intro questions that I usually ask to all my viewers

So Mac or PC?

David Ma

Mac

Joma

Easy

Iphone or Android?

David Ma

iPhone, I'm boy.

Joma

you're a fanboy

David Ma

Yep!

Joma

See, Favorite language?

David Ma

Spanish

Joma

Spanish?

David Ma

Yeah, this sounds really nice.

Joma

Favorite programming [laughing]

David Ma

all right, so I said

Joma

if you think

people always make that mistake

oh my God!

David Ma

Language [you know], I don't really care

Joma

mm-hmm

David Ma

I use Java now

Joma

I like that I like

oh yeah, is Java?

David Ma

Yep

Joma

Wow, like on your startup

David Ma

Yeah

Joma

we'll talk about this later.

what about favorite editor?

David Ma

Microsoft Word.

also ambiguous because the IDS aren't really nice now these

days. But I used to use them otherwise.

Joma

yeah yeah mm-hmm

I mean honestly I used them because of you

David Ma

yeah

Joma

because in case you mean and then you

David Ma

gotta suck it up

Joma

Yeah, pretty much. Learn all these commands and stuff but... yeah I remember you started then because you were that Facebook? Right? day me

David Ma

No no no, vim was first-year University okay, SSH like I had to use something [Joma: mmm] and then was one of the choices and like

people [Joma: now I see] I said it was good, but then I really got good at Facebook, because I mean that was a pretty much one of the only choices

Joma

oh wait, I got one more in user submitted

tabs or spaces?

David Ma

obviously space

Joma

what you press space or you mean like tab identity becomes

David Ma

Yeah not, a lot of space

Joma

yeah yeah

that's a big big differentiator

yeah all right cool

so I heard you are a quantitative researcher?

David Ma

that is correct

Joma

yeah so wait

where'd you work again?

David Ma

two sigma

Joma

Oh interesting

I didn't know that

David Ma

well you're a bad brother

Joma

yeah all right cool so ok

what is 2 Sigma exactly?

David Ma

2 Sigma is a quantitative hedge fund [Joma: mmm], they use mathematics, statistics, computer science to make money on the stock markets on various financial markets

Joma

cool cool

and then as a quant, what I do?

David Ma

there's different types of points, the stuff that I did was to find to predict the movements of stock prices [Joma: ok] and through [you know] statistics I see

Joma

so basically do a lot of like forecasting

David Ma

Forecasting?

Joma

Yeah

David Ma

that's a good word

Joma

ok cool

so you're trying to predict movements and then you're gonna bet on that and stuff like that, and then you probably have like a lot of different, what else do you have to do it? you have to have like I heard a lot of them, the term, what is it? Alpha?

David Ma

yeah

Joma

was that?

David Ma

Yeah, so alpha is just a term to signify that, you've you're able to predict the market better than the average person on the market

Joma

Oh god, I got it okay

so hired alpha

David Ma

yeah

Joma

it's better?

David Ma

higher offer the bedroom

Joma

Cap there's gay

seems pretty simple

just a quick question

how much stats background or math background do you need to be successful as a quant? Because is it like do you have to be genius [you know], did you do competitions?

David Ma

definitely not, it's good to have a solid understanding like a basic understanding of statistics to not make the worst mistakes, like personally I took third year stats third and fourth year stats at Waterloo which is not it's not graduate level or anything like that

[Joma: mm-hmm], but basically the the most important things I think is to have creativity and to think critically about your data and like about the process where that data was generated I think that's more much more important than like the actual statistics

Joma

right so what you mean creativity what do you mean the

reason why I ask is because I would

think I need creativity as a data

scientist but also because I think I'm a

lot less technical than you in terms of

like stats knowledge because a lot of

the times I'm just like they're just

average these things up and then they

just take that very that's even if

there's they're like cool like whole

correlated right what's creativity for

you so I mean just talk about those kind

of stats like that's actually kind of

enough as long as you're aware of where

your biases are right your effects are

so much larger than whatever bias like

it doesn't matter like that's a good

case but yeah when you're trying to find

like tiny differences then sure it'll

matter but hopefully that's not the case

because you want to find a lot of alpha

right and that's where the creativity

comes in you want to find things that

other people have not thought of maybe

like oh let's use satellite imagery to

look at how full wells are in order to

predict some commodity prices and stuff

like that that was creative yeah at some

point it became not created because you

know I want to do a lot of here got it

so are you saying that like strategies

like for hedge funds

if you're the only one doing it you

might be profitable but if everyone

starts doing it

that's correct becomes less profitable

it's called crowdedness mmm interesting

so I heard you know especially from

friends at Citadel that they work super

long hours you know it's hard and then a

lot of times when I ask software

engineers if they would like to switch

to finance because they know that

finance they pay a lot you know but then

they always come with the excuse saying

yeah but I don't want that like crazy

work hours so is it true like the you

work long hours

it depends on the like personally at 2

Sigma it was not that long i I think I

averaged 10 hours 10 hours a day okay

and it's not like it's not 10 hours of

like intense you have to be always on

like first of all that was research this

that's what I did software engineering

is probably even less hours at 2 Sigma

mm-hmm the culture at 2 Sigma was like

of someone of a balanced culture between

life and work so they wanted people that

would come in and not you know have a

good have a good life not leave a lot

leave too soon

mmm yeah that makes sense it's it might

be true in other companies that 2 Sigma

was pretty balanced yeah do you have any

friends who came from Silicon Valley

then worked at finance or worked in

finance then Silicon Valley and how do

you know how they compare like I think

it was pretty similar pretty simple yeah

of course the the things that you're

working on was pretty different yeah but

like to say might try to make you know a

Silicon Valley style culture do you

think it's the same for like Citadel and

like other finance companies it's hard

to know

I mean I've never been there like they

are competitors they work yeah

no it's nice ok so let's talk about your

background so how did you get into Kwan

like first how did you discover it and

what do you think like your background

should be to me you know to get an

interview right at least the first time

that I heard about like quants

was in my CJ I had it I had this

professor he was like it was 2007 right

financial crash and like they're like

housing crisis and stuff like that he

was like blaming oh it's the cons like

that's the bad stuff they use their

mathematical models of to to create

financial disaster I was talking to my

friend I was like oh yeah that's my god

that's why I want to be you know and you

actually became one I didn't know what

it what it was because like at that time

I wanted to be an actuarial major

because I was like oh I like math let's

let's see what I can do with math and

that's all I knew but like through the

years at at Waterloo

you know I learn how to code I learned

about predictive statistics and then at

some point near the end I was like well

all these things together well it was a

good fit for mmm for it to be a yeah

research Kwanza so what was your major

in University of Waterloo mathematics

mathematics at Waterloo is very

ambiguous yeah you can like take

whatever you want

so you take stats where were you like a

math genius like did you do contests I

mean I did contests when I was in high

school ranked 2nd in Quebec would oh oh

I didn't know about other you didn't

know that oh yeah

only there's only one competition that

ranked second I was like my peak mmm

but otherwise no I wouldn't consider

myself genius in any way it was more

combination of multiple things that led

to guy yeah he's like computer science

stats and some interest in finance

hmm so if you had to tell a high

schooler like my boy Matt show behind a

camera or like an early college student

yeah they want to be a quant you really

want to be a quant mhm like don't even

tell me if it's actually my passion or

not but just I just want to be cool okay

what do you do right now

computer science mm-hmm

stats do some keggle competitions I

think that's good haggle that is one

thing they discovered pretty early on

and I ranked like some somewhere the top

10 for a competition this is not a

humble bragging interview for you that's

not saying that you're still fun okay

that was at the time when it was easy

very cool all right

it was easier honestly because now like

there's like so many PhDs like I'm super

competitive okay on Kegel it's a it's

overcrowded yes that's right all right

so what about like um like interviewing

at these companies how hard is it or

like what kind of questions do you ask I

would say it's hard because maybe not

because other questions they ask but

because so many people want to apply

like these days I wonder if if I apply

now whether I wouldn't get in it's kind

of a what kind of questions do they ask

technical questions obviously you have

to know your computer science you have

to know your statistics I spent a whole

day just going through all these

questions that people compiled online

okay where do you find these questions

like behind the crate in the coding

interview yeah cracking the code that's

a glass door there's like some quant one

that people have compiled like more

statistics and like more probability

questions brain teasers like just go

through all of them it's like just to

maximize your chances huh these honestly

I don't think it's like a really good

you don't it's not like you use this

under on the job especially the brain

teasers but it kind of filters out the

people who are like I'm gonna do

although this rare array okay so

basically hard-working people yeah it's

it's it filters with some training yeah

in conclusion from what I understand

Kwan's

you know they they're basically like

data scientists I feel like they're a

little bit more rigorous you know they

use mathematical models to try to

predict the markets so that it can make

money for the hedge fund it's good

summer and cold alright so let's talk

about a little bit of it you know you as

a person

because we want to know like how does

one have an interesting tip Juan so

thinking about when you were a kid do

you think you have like behaviors where

it kind of indicated that you're more a

technical person a more mathematical

person you know hmm like for me I was

yeah so yeah you can go Chris oh well

for me I think it was just like playing

games they're like RTS then you know how

you had to manage money or stuff like

that or also like building stuff in

Kingdom Hearts oh yeah you know that

that would be a very engineering jessamy

yeah that was very impressive I really

enjoyed reading detective stories oh

yeah I don't know how that relates to

the Kwan because you have to investigate

data right I find out like as a data

scientist it's it's kind of like a

you're kind of like a detective but your

your subject is data you have things

that you want to investigate and you

have to like find ways of like answering

that question through evidence I like

the I really like that analogy because

it feels like in the end the data is

just data and then all the statistic Kol

knowledge yeah and if you're really

technical it doesn't make you a better

data scientist right what's important

right is the questions you ask and how

you get those answers and also like

being able to take synthesize all the

evidence that you that you've you found

and into like one coherent story right

that's like a very detective thing to do

right right because like if there's one

like if there's like one piece of

evidence that doesn't fit with the story

it's something's wrong right right okay

cool so what about the side one now what

do you do outside of work aside from you

know when you actually work what are

your hobbies

um Eddie photography in bed these days

was it like an Instagram I mean it's not

that good Jumana paw I haven't haven't

done much dinner in a while wait your

handles actually at David MA yeah so

lucky I also have David MA

hmm yeah you could check out the website

it's pretty plain

yeah that's pretty yeah I need it

some sort of designer contact me the

enemy

well it's literally just a text yeah and

it's and it's super updated it says I'm

a client that oh yeah not sure anymore

oh right true yeah so you're not a

quantity more so what do you do now I

work at a startup we're still very small

we are building a real estate agent

assistance and we help real estate

agents schedule things with prospects

managers schedules collect data about

their performances so that you know this

can this stuff can be automated so that

they can focus on the stuff they do best

which is selling to people who come in

cool cool you guys doing well pretty

well I think pretty well nice is on my

disc or channel I also asked them to ask

UK you questions or us questions how to

get your little brother a girlfriend

it's hopeless

it's hopeless that's what with yeah why

do you think is hopeless what's what's

wrong with me

I have theories but what do you think

well I was actually kidding he's

actually tons of girls he just doesn't

tell you guys that's not sure it's not

part of my brand next question what was

Joma like when he was younger less

confidence oh really yes that's true

yeah that's true I think that summarizes

the biggest the biggest difference yeah

mm-hmm all right if next question

favorite video game oh yeah um probably

smash oh really yeah yeah that makes

sense I mean I hate that you're better

than me I'm so good but like it's really

it's a really good smash melee yeah you

never got one of them to learn the

advanced techniques though yeah it's

true

that's what you're not blocked yeah yeah

I was like like try to break that I like

who is smarter Jomar David I'm gonna

give us serious answer for this well

really yeah yes serous I'm sorry when as

a kid

I thought I was smarter no I think you I

think you're still are smarter because

as a kid all right like in the earlier

stages I thought look oh yeah

like IQ tests and like math they're like

being clever at those kind of things was

meant that you were smarter and I think

I'm better than that that kind of stuff

but I realized like after some

university and like especially after

after that there's so many ways of being

smart and I kind of find that in general

like I find you learn things faster than

me and I think now I think you're you're

smarter than me thank you

what kind of music are you have put on

this I don't know I'll have to think

about it I think you're you're smarter

than me man tonight

toric you sir offices some yeah but yeah

definitely like thank you first of all

it's very nice for you to say but no it

was not that clear is not that charity

right wasn't gentlemen no thank you

thank you yeah yeah but I do want to say

like yeah definitely like quantitative

wise and stuff like that you were always

like smarter sometimes it did feel like

I was like living under your shadow in

some ways right again it's cute I'll

leave that ya know but but yeah like I'm

glad like hopefully someday I feel like

cuz you in some ways paved the way for

me internet like my education what I did

and stuff like that mm-hm I just hope

that one day I can like give back you

know I think you are already doing it at

scale kinda really yeah thank you

cool you don't have a smaller younger

brother but yeah you're doing what you

can

mm-hmm I think in the end like whenever

we're successful

you should just lead the way for some

other people romantic man Beckett I'm

just I'm just trying to make money on my

youtube channel alright so thank you for

watching if you like this video don't

forget to like and subscribe and if you

want to see some of my brothers

photography it's at David MA

[Music]