CHRISTCHURCH CODE CAMP

I'm speaking at Code Camp Christchurch Rebooted!

My Journey with AI: From Curiosity to Eureka

Nov/1/2025 — Christchurch, New Zealand

Michael Rea

sessionize

Who am I?

Michael Rea

Ara Graduate BICT Software Pathway

Personal Projects and Learning

Available for Software Development Work

https://www.linkedin.com/in/michael-rea-4441b9219/

https://github.com/MichaelRea-NZ

Outcome

Share different ways of using AI

Take away new ideas to use AI

Outline

Tell my AI journey

Highlight different uses

Questions ???

Sharing Ideas at the end

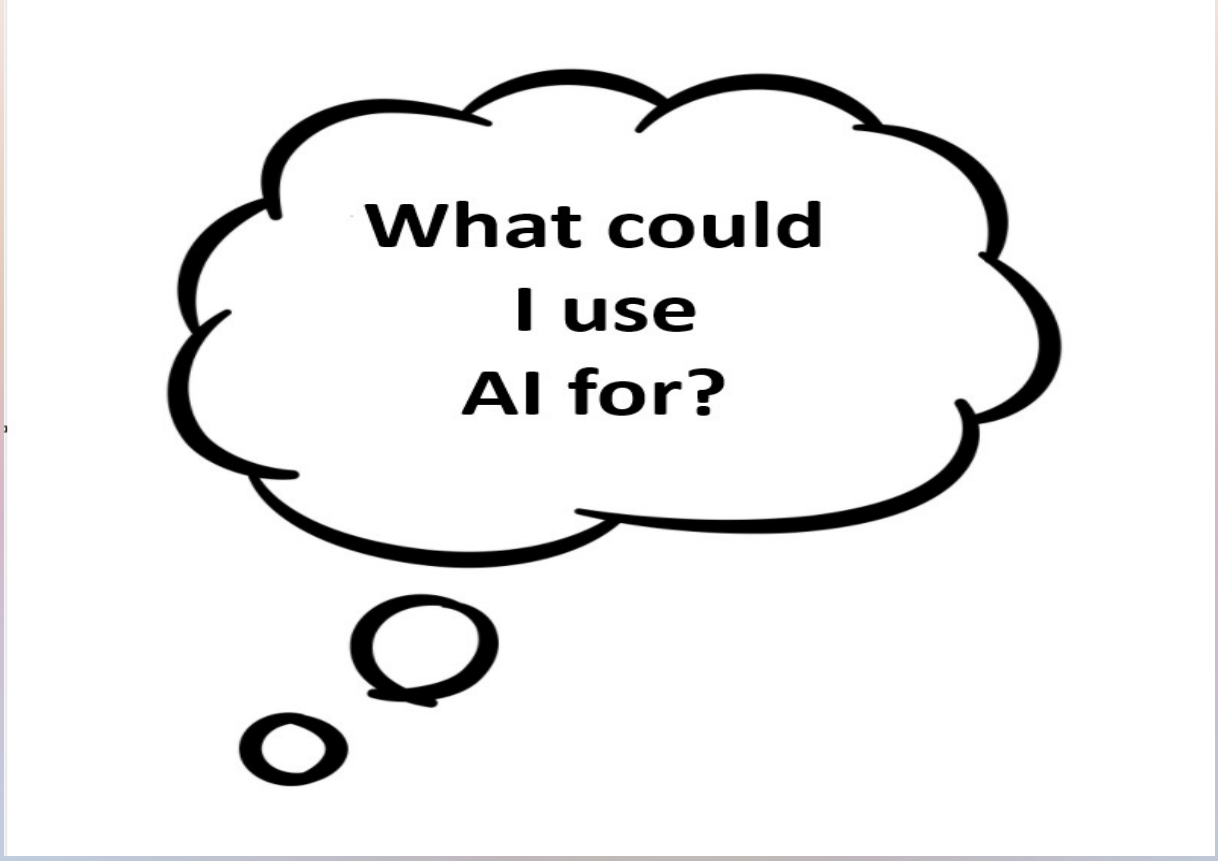
Why I took so long to start using AI

Completing my degree

Life was okay without AI

What got me started?

What got me started?



My cover letter

Dear Sir / Madam

I am writing to apply for the Software Developer vacancy as advertised on Seek.

Having graduated in 2022 with a Bachelor of Information and Communications Technologies (Software Development Pathway) from Ara/Te Pukenga I am interested in a Software Developer position. I find software development is a passion of mine. A good example of this is the amount of my spare time I spend programming.

Through my studies and personal projects and developments I have used C# as can be seen on my CV. Since graduating I have continued learning new technologies such as Arduino by creating my own devices. Other examples include creating a shopping list app using various languages and platforms as part of my portfolio. While at Ara I have gained experience with working with SQL and relational databases.

A copy of my CV has been included. It shows important skills I will bring to the position, and includes other skills not listed in your advertisement. It also contains links to my GitHub and YouTube channel which so some examples of my work.

I look forward to discussing my application with you.

Thank you for considering my application.

Yours sincerely

Michael Rea

AI cover letter

Dear Sir / Madam,

I'm writing to express my keen interest in the **Software Systems Developer and Support Engineer** role. As a recent Bachelor of ICT graduate with a deep interest in software development and systems engineering, I'm drawn to InFact's reputation for delivering meaningful, cutting-edge solutions across high-impact industries.

Throughout my academic journey and personal projects, I've honed a solid foundation in full-stack development and embedded systems. From building a shopping list app across multiple platforms (JavaScript, React, Python, Xamarin) to creating custom Arduino devices for real-world problems—like logging fridge door usage or developing a bird deterrent—I've consistently taken initiative to learn, build, and solve. I've also had the privilege of developing a software framework for a web-based war game platform during my internship with Dr Mike Lance, which emphasized the importance of designing scalable, user-centric systems.

What excites me about this role is the combination of software development with client-facing support. My background in customer service, combined with my technical skill set (including C#, .NET, SQL Server, Git, React, and Blazor), makes me well-suited to bridge the gap between users and engineering teams. I'm confident in my ability to communicate effectively, triage technical issues, and continuously improve support processes through smart, automated solutions.

Joining a multidisciplinary team like yours—where collaboration, curiosity, and real-world impact are at the core—aligns closely with my values and career goals. I thrive in environments where I can learn from experienced developers, contribute to meaningful projects, and grow into a role with both technical and client responsibilities.

I'd love the opportunity to discuss how I could contribute to your continued success. Thank you for considering my application—I look forward to the possibility of speaking with you.

Warm regards,
Michael Rea

C# Certification Practice Tests

Q1. Which keyword is used to define a constant in C#?

A. const

B. static

C. readonly

D. define

[Course: Work with variables, data types, and expressions in C# | Module: Work with variables, data types, and expressions in C#]

Q2. Which loop structure is ideal when the number of iterations is known?

A. while

B. foreach

C. for

D. do-while

[Course: Control the flow of execution with C# | Module: Control the flow of code execution in C#]

Early Errors

Q24. What is the output of this code?

```
int a = 10;
int b = 3;
Console.WriteLine(a % b);
```

A. 1

B. 2

C. 3

D. 4

Early Errors

Q24. What is the output of this code?

```
int a = 10;
int b = 3;
Console.WriteLine(a % b);
```

A. 1

B. 2

C. 3

D. 4

Q20: B

Q21: A

Q22: C

Q23: A

Q24: B

Q25: A

freeCodeCamp
Microsoft
This certifies that
Michael Rea
successfully completed the
Foundational C# with Microsoft
Developer Certification on October 15, 2025
Quincy Larson
Executive Director, freeCodeCamp.org
Julia Liuson
President, Microsoft Developer Division
Verify this certification at:
https://freecodecamp.org/certification/fcc55388631-3743-48d1-b433-2e3b27ac2d90/foundational-c-sharp-with-microsoft

Family Timeline

1860

- January 23rd - Elizabeth jnr born.

1861

-

1862

- April 12th - "*ELECTORAL DISTRICT OF HEATHCOTE—CLAIMS TO VOTE.—IB 62. Lyttelton Times, Volume XVII, Issue 983, 12 April 1862, Page 6*"

1863

-

1864

-

1865

-

1866

- February 5th - Advertisement supporting WILLIAM MONTGOMERY.
  "*Page 1 Advertisements Column 5*
  Press, Volume IX, Issue 1017, 10 February 186 age 1"

More Gen AI Workshops and Meetups

More Gen AI Workshops and Meetups

Based on what you know about me make an action figure of me.

More Gen AI Workshops and Meetups

More Gen AI Workshops and Meetups

More Gen AI Workshops and Meetups

East India Company

The British east India company. When was it at its prime and who were the major shareholders at that time?

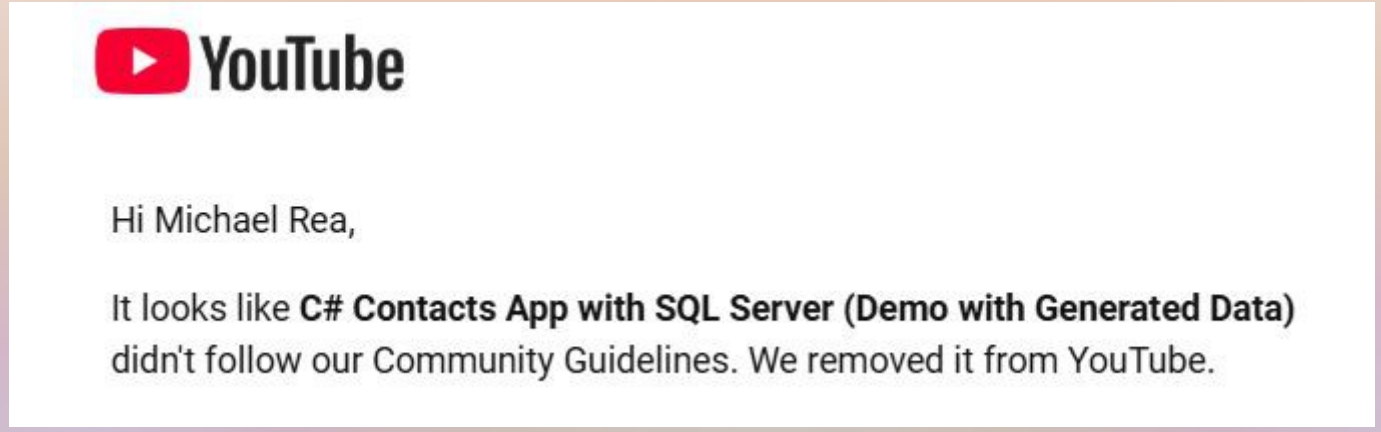
East India Company

Who were the top 10 notable shareholders in 1858?

East India Company

1. The Clive family (Earls of Powis)
2. Barings Bank
3. The Rothschild family (Nathan Mayer Rothschild & Sons)
4. Estate of Warren Hastings
5. Family of Charles, Marquess Cornwallis
6. Sir Charles Forbes & family
7. Sir James Lushington (Bart.)
8. John Masterman & Company
9. The East India & London Assurance Company
10. The Court of Directors collectively

YouTube appeal



YouTube appeal

YouTube Appeal – Request for Reinstatement

Hello YouTube Team,

I’m requesting a review of my removed video:
“C# Contacts App with SQL Server (Demo with Generated Data)”

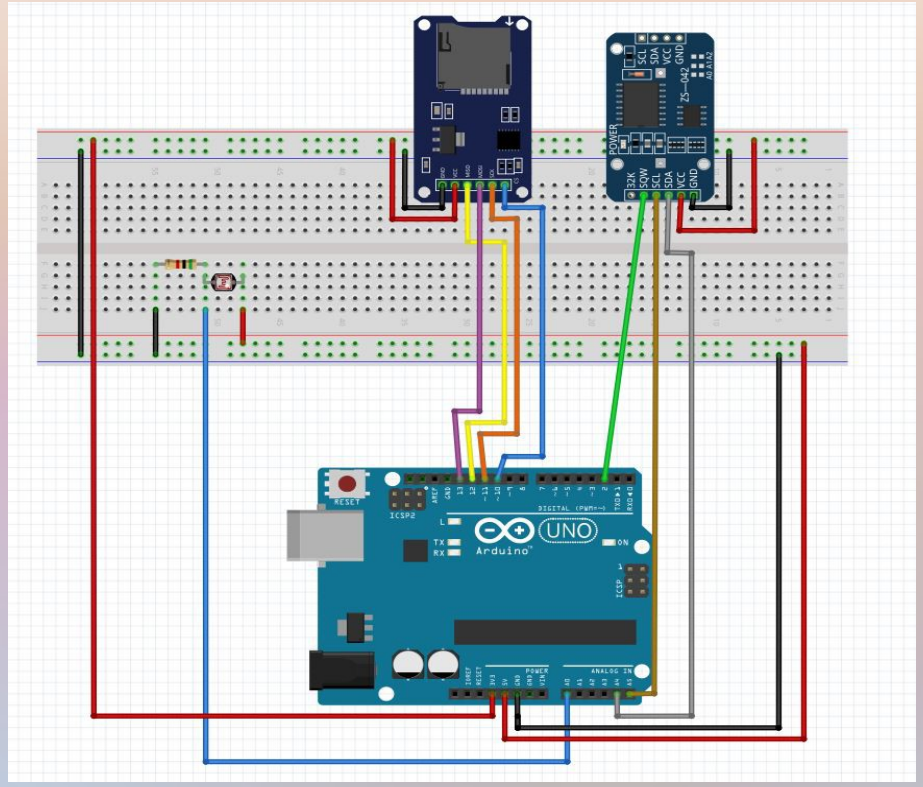
The takedown cites a violation of the harassment policy for sharing personal information. However, the video only uses completely fictional, computer-generated sample data for demonstration purposes. No real names, phone numbers, emails, or identifying details were shown.

This was an educational coding tutorial, not actual personal information.

I believe the removal was a misunderstanding and kindly request a manual review.

Thank you,
Michael Rea

Bug Fixing



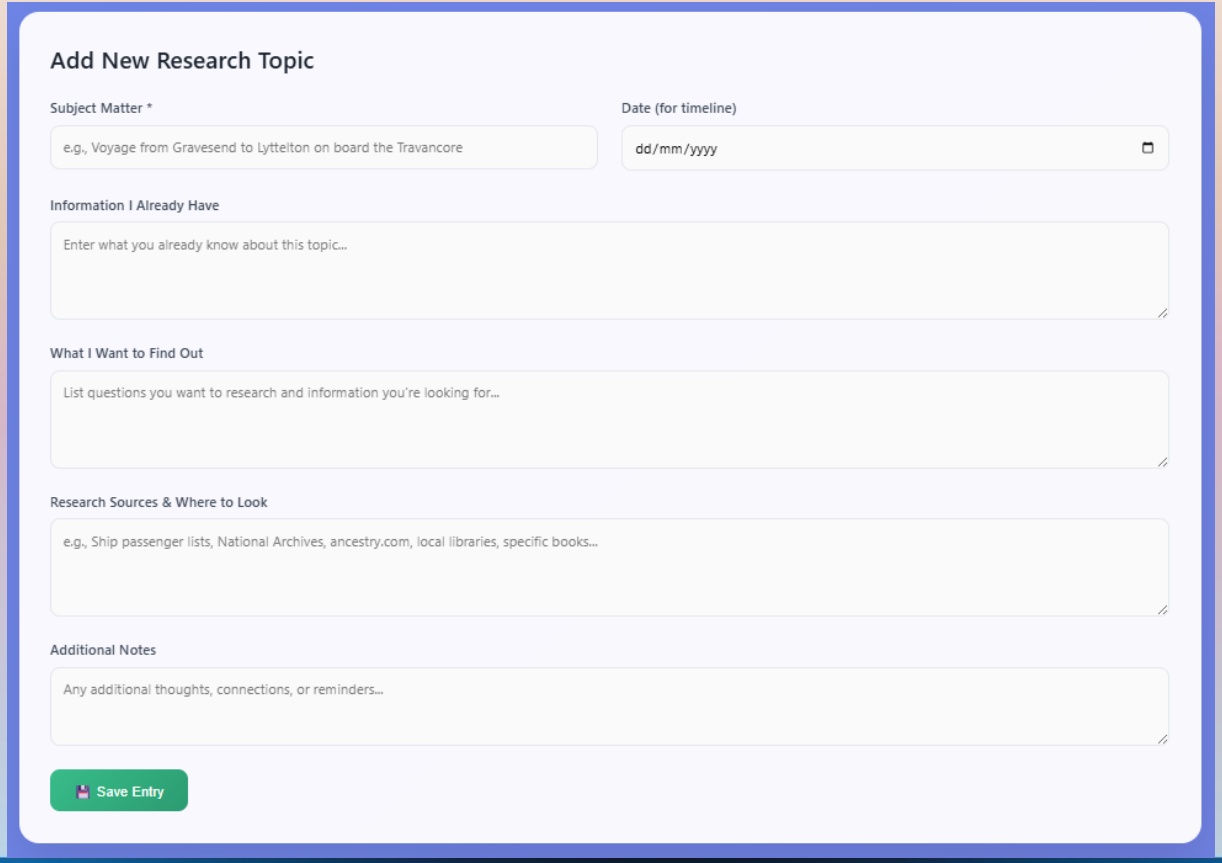
Bug Fixing

```
while (!Serial) {
  ;
}
```

Bug Fixing

```
// The below while loop is only ment to run while the USB is connected.
//If the USB is not connected the loop can cause faulty output.
// while (!Serial) {
//    ; // wait for serial port to connect. Needed for native USB port only
//  }
```

Vibe coding


Add New Research Topic
Subject Matter *
e.g., Voyage from Gravesend to Lyttelton on board the Travancore
Date (for timeline)
dd/mm/yyyy
Information I Already Have
Enter what you already know about this topic...
What I Want to Find Out
List questions you want to research and information you're looking for...
Research Sources & Where to Look
e.g., Ship passenger lists, National Archives, ancestry.com, local libraries, specific books...
Additional Notes
Any additional thoughts, connections, or reminders...
Save Entry

Vibe coding

Weekly Roster

Generate New Roster

Monday, 25 August 2025

Role	Staff Assigned
A	Alice, Harper, Mia, Elise, Dante, Quinn, Ben, Cara
B	Olivia, Julia, Kieran, Isaac, Grace, Noah, Felix, Sophia
C	Liam, Theo, Riley

Tuesday, 26 August 2025

Role	Staff Assigned
A	Alice, Harper, Ben, Kieran, Mia, Riley, Noah, Dante, Cara
B	Isaac, Liam, Grace, Julia, Felix, Priya, Olivia, Elise
C	Theo, Sophia, Quinn

Code Smells

```
try:
    num1_val = float(num5.get())  # Get the actual values first
    num2_val = float(num6.get())

    if num2_val == 0:  # Check the converted float value
        messagebox.showwarning("Division Error", "Cannot divide by zero!")
        return
```

Code Smells

```
try:
    if float(num6.get()) == 0:
        messagebox.showwarning("Division Error", "Cannot divide by zero!")
        return
```

Code Smells

M this works and is 2 lines of code less.

```
if float(num6.get()) == 0:
```

Code Smells

M this works and is 2 lines of code less.

```
if float(num6.get()) == 0:
```

- You're absolutely right! That's a much cleaner solution:
- Your approach is more efficient because:
- 2 fewer lines of code
- No extra variables needed
- Direct conversion and check in one line
- Same functionality with cleaner syntax
- Good catch! Sometimes the simpler solution is the better solution.

Programming with AI

- Working out what is wrong.
- Finding suitable individual components.
- Creating apps that are accessories of larger projects.
- Not for stand alone application projects.

Eureka!

The Eureka Moment

Based on what you know about me what tough love statement do I need?

The Eureka Moment

Stop second-guessing yourself and circling around ideas — pick something, commit, and finish it.

The Eureka Moment

Stop second-guessing yourself and circling around ideas — pick something, commit, and finish it.

Want help turning that into a plan?

Just say so — but promise you'll follow through.

The Eureka Moment

Want help turning that into a plan?

Just say so — but promise you'll follow through

The Eureka Moment

1. Software Dev Career
2. DIY Projects (Apps, Arduino devices)
3. Leisure: Tramping, fishing, gardening
4. Historical Research (James & Elizabeth Gilbert Book)
5. Current job.

The Eureka Moment

1. The real battle is your software career.
2. Leisure is for sanity — keep it balanced.
3. The book has a clear deadline.
4. Storeman job is a given — leave it alone.

The Eureka Moment

And added a pathway for me to take for the number one priority.

The Eureka Moment

Followed by a first step to do list.

The Eureka Moment

Using this framwork lead to.

What is Eureka

1. Profile
2. Productivity
3. Focus
4. Procrastination

What do you use AI for?

Landscaping

Gaming

Conversations