# KORY FRANKEE

# Pi-shaped engineer specializing in software & ML engineering

Seeking roles where I can develop and utilize my knowledge in programming for all applications (backend server, frontend GUI, game, machine learning model, embedded, & desktop development as well as data-related work). Open to learning any professional industry-relevant technologies. Have the most experience with C++ and web technologies. Within this role, I'd like to develop senior-level expertise over time and work up to a technical leadership position. I'm comfortable with writing process, technical, or user documentation as well as with managing the corporate knowledge base if there's a need for this.

# AVAILABILITY FOR WORK

- Have full working rights in Australia. Australian born citizen
- · Have a driver's license (and car) so able to commute to-from work or between work sites faster
- Free full-time from the 1st of December, 2025. Free part-time during semester 1 of 2026 I'll be studying 3 courses.
- Open to local work in Adelaide, South Australia and remote work

### CONTACTS / PROFILES

- E-mail: <a href="mailto:hirekory@pm.me">hirekory@pm.me</a>Phone number: [To add]
- LinkedIn: https://www.linkedin.com/in/koryfrankee/
- GitHub: <a href="https://github.com/ProjectsKoryHasWorkedOn">https://github.com/ProjectsKoryHasWorkedOn</a>

# COMPLIANCE REQUIREMENTS MET

- Cleared to work in roles requiring background checks and screening (E.g. Working with children & NDIS worker check)
- Compliant with all relevant laws, policies, and procedures to role
- Have experience properly handling sensitive PII information (E.g. Financial & Health information)

Willing to complete any background checks on an as needed basis

# WORK HISTORY

# Looking to gain more work experience in technically challenging roles within my field of interest

SOFTWARE ENGINEERING INTERN

Novita Services | novita.org.au

202

• I developed solutions for executive leadership and finance department staff at Novita that could better respond to the needs of the business than the existing systems in place, improving operational efficiency, improving data accuracy and visibility, reducing operational risk, and enhancing client and staff satisfaction

TECHNICAL FOUNDER

Hopping Forwards | hoppingforwards.com

2024-

My own business that I run in the time remaining after allocating time for studying and/or working full-time.

2025

• I produce human-centered educational software from concept to completion, create and share industry-relevant content through in-person events and a YouTube channel, and build bespoke STEM solutions for business and non-profit clients

# EDUCATION

BACHELOR OF SOFTWARE ENGINEERING (HONORS)

2022-present

# Flinders University | Adelaide

I obtained an award for displaying excellent innovation and creativity in the design of a game.

I received a Chancellor's Letter of Commendation in recognition of excellent academic performance.

I obtained a GPA of 6.36/7 (so far)

BACHELOR OF COMPUTER SCIENCE & DIPLOMA IN ARTS (MAJOR IN PHILOSOPHY) (PARTIAL)

2017-2019

# University of Adelaide | Adelaide

I withdrew from university in 2019 to spend more time in the working world. I worked in the construction, manufacturing, warehouse and logistics, packaging, postal services, and waste management industries over the span of a few years. I then returned to university in 2022 with certainty that I wanted to pursue a software engineering career.

With the high GPA that I had, I was able to enter the advanced versions of the degrees offered.

SOUTH AUSTRALIAN CERTIFICATE OF EDUCATION

2016

# Nazareth Catholic College | Flinders Park

I obtained an ATAR of 82.75/99.95 and subject award for IT in year 12 for outstanding academic achievement.

# CERTIFICATIONS

NETWORK ASSOCIATE 2025

Cisco

CYBEROPS ASSOCIATE 2024

Cisco

#### CAREER INTERESTS

#### ORIENTATION

· Enjoy working with objects, concepts, and systems

#### ACTIVITIES

- Designing digital assets for projects, being creative
- Developing open source applications, creating something of value to communities I'm involved in
- Developing careware, encouraging donations to charities such as the Australian Wildlife Conservancy (AWC)
- Exploring the applications of AI, particularly where it pertains to computer vision
- Familiarizing oneself with in-demand technologies, keeping up to date with industry trends
- Having my unique spin on things, expressing myself and creating what's novel
- Identifying gaps in the market and proposing technological solutions, being innovative
- Leading a development team on business projects, coordinating with others to meet desired outcomes
- Managing business projects, ensuring everything is accounted for
- Paying for professional training, filling in gaps in my knowledge
- Producing plans, being well-prepared
- Reading technical books, filling in gaps in my knowledge
- · Creating content in the form of blog posts and tutorial videos, engaging others and sharing what I know
- · Contributing to real-world projects alongside industry professionals, applying my knowledge
- Building my personal brand, highlighting my expertise
- Adding to my knowledge base, organizing and recording what I know
- Systematizing processes, optimizing workflows
- Testing out different approaches, experimenting to see what's best. Evaluating what approach was the most effective, having this inform future decision-making on how to best proceed
- · Working with one's hands and with machines to make tangible things, seeing the results of one's labor in the real-world

# ROLES

I have an interest in applying myself to STEAM (Science, Technology, Engineering, Arts, and Mathematics) and business roles. This includes roles I have less experience in as I'd like to leverage my cross-role competencies and further broaden my expertise

Data engineer	Full stack software engineer	Product manager	Technical writer
Knowledge management specialist	Systems administrator	Technical leader	Data modeller
Content creator	User interface/experience (UI/UX) designer	Cybersecurity specialist	Business analyst
Cloud engineer	Web developer	Desktop developer	Computer vision (CV) engineer
Machine learning (ML) engineer	Technical solutions architect	Business intelligence developer	Data scientist
Embedded systems developer	Entrepreneur/ Intrapreneur	Database administrator	Business systems analyst
Production worker	DevOps engineer	Data analyst	Project manager
Game developer	Graphic designer	Learning/ Instructional designer	Data steward

# SKILLS PERTAINING TO THESE ROLES

COLOR CODING

Well-versed in

# SYMBOLS

Legacy/Emerging technologies

# **STEM skills**

- Assembly skills
- Back-end development skills
- Cloud engineering skills
- Creating and understanding DB documentation: Schema diagrams (ER/UML), Data dictionaries
- Creating and understanding software diagrams: Client-Server interaction diagrams, State machine diagrams, Structure charts,
   Data flow diagrams (level 0/context diagram and level 1)

- **Creating and understanding software documentation:** Software requirements specification (SRS), Technical specifications documentation. Developer notes
- Data engineering skills
- Data modeling skills
- Deploying code to end-user platforms: Ubuntu Server, Windows, Android, Flinduino (PIC32MX250F128D)
- Debuggers: GDB
- Databases: MySQL 8.0, MariaDB, MongoDB, SQLite, Microsoft SQL Server
- Desktop development skills
- Electrical engineering skills: Digital electronics, Analog electronics, Micro-controller programming
- Fabrication skills
- Following technical procedures
- Front-end development skills
- Manual handling skills
- Mathematics (undergraduate level): Studied math texts such as "Discrete mathematics with applications" (Epp), "forallx Adelaide" (Eagle), "Calculus" (Stewart), and "Introduction to probability models" (Ross) as part of my undergraduate studies
- Mathematical abilities:
  - Algebra: Linear algebra, Abstract algebra
  - Calculus: Differential calculus, Integral calculus, Series and sequences, Vector calculus
  - Discrete mathematics: Propositional and predicate logic, Proof techniques, Set theory and relations, Functions,
    Combinatorics, Graph theory, Recursion and induction, Algorithms and complexity, Boolean algebra, Introductory number
    theory
  - Differential equations: Ordinary differential equations, Systems of ODEs
  - Statistics: Descriptive statistics, Inferential statistics, Correlation and covariance, Model evaluation
  - **Geometry:** Vector geometry, Analytic geometry
  - Probability Theory: Foundations, Conditional probability, Distributions, Counting, Recurrence relations
- Mobile application development skills
- Parallel programming
- Software testing skills
- Soldering
- System administration skills: Linux and Windows systems
- Troubleshooting skills
- Web development skills
- Working to patterns: Controller-Service-Repository, Model-View-Controller
- Working with algorithms: Depth-first search (DFS), Topological sort, Breadth-first search (BFS), Dijikstra, Knuth-Morris-Pratt
  (KMP) search, Boyer-Moore search, Brute force search, Levenshtein, Insertion Sort, Selection Sort, Bubble Sort, Quicksort,
  Merge Sort, The Game of Life algorithm, Singular Spectrum Analysis (SSA)
- Working with APIs: Rest API, AWS Translate API, AWS Polly API, AWS Comprehend API, OpenWeatherMap API, Google
  Directions API, Google reCAPTCHA API, Open Street Map API, Telegram bot API, Bunny.net API, Stripe API, PayPal API, ClickUp
  API, Microsoft Graph API, DropBox API, GitHub API, Tawk.to API
- Working with API tools: Postman, Bruno
- Working with build systems: make, Cmake 3.22, Qmake
- Working with CI/CD tools: GitHub Actions
- Working with classes: FPDF
- Working with cloud platforms: Amazon Web Services (Cognito, EC2, RDS, SES, WAF, Route 53, Certificate Manager, Billing & Cost Management, VPC, IAM, IAM Identity Center, S3, CloudWatch, SNS, CLI, Shield, KMS, Organizations, Polly, Comprehend, Translate, WAF), Google Cloud Platform (Google Identity Platform), Bunny.net (Stream), Microsoft Azure (App Registration, AI Document Intelligence, Enterprise Applications, Blob Storage, Entra ID, Key Vault, SQL Database, Subscriptions, Users, Azure Container Registry, Azure Container Apps)
- Working with code editing tools: vim, nano
- Working with code coverage tools: gcov, lcov
- Working with compilers: GCC
- Working with containerization tools: Docker, Microsoft.VisualStudio.Azure.Containers.Tools.Targets
- Working with data structures: Array, Dynamic array, Linked list, Stack, Queue, Binary Tree, Graphs {Edge List, Adjacency Matrix, Adjacency List {Directed, Undirected}}, Binary Heap, Hash map, Trie
- Working with DB tools: DataGrip, phpMyAdmin, MySQL Workbench, DB Browser for SQLite, Azure Data Studio, SQL Server Management Studio, SQL Server Data Tools for Visual Studio, MySQL CLI
- Working with content management systems: Sanity CMS
- Working with data formats: CSV, JSON, TOML, GraphML, XML
- Working with file management protocols: FTP(s), SFTP, SCP, SSH, FXP
- Working with file analysis tools: ExifTool, HxD Hex Editor
- Working with frameworks: Qt {Core, GUI, Widgets, QML, Quick, QuickControls2, SQL, PDF, Location, Multimedia, Positioning, LinguistTools, WebView}, Express.js, Mocha, Zombie.js, Symfony, .NET 10.0, ASP.NET Core {Blazor Server}, Bootstrap
- Working with languages: Bash, PowerShell, C++ 23 {STL}, C, QML, Processing, Power Query M formula language, Arduino programming language, C# 14, Java {java.lang.\*, java.util.\*}, HTML, CSS, PHP 8.4, SQL, JavaScript (JS), Markdown, TeX/LaTeX, Handlebars, R, Cisco IOS CLI commands, ActionScript3 †, Visual Basic †, Visual Basic for Applications (VBA) †, Microsoft Power Fx †, Microsoft Power Platform CLI †
- Working with libraries: POCO, Crow, libcrypt, fmt, Chai.js, TOML++, argparse, OpenSSL, Minim, Google Test, JUnit, PHPMailer, TwoFactorAuth, he, Luxon, FullCalendar, Nodemailer, mysql2, express-handlebars, dotenv, bcrypt.js, SuperTest, cookie-parser,

body-parser, express-session, Chart.js, EmailValidator, Google Cloud Recaptcha Enterprise, Gmagick, jQuery †, Cheerio, AWS SDK for JavaScript, AWS SDK for C++, GraphStream, Swing, JDOM, BlazorDatasheet, FluentAssertions, Microsoft.Data. SqlClient, Dapper, Sep, Tomlyn, Fastenshtein, PdfPig {tabula-sharp}, CSVHelperCS, Microsoft Outlook 16.0 Object Library, Blazor-ApexCharts, Excubo.Blazor.Canvas, Frappe Gantt, jsPDF, html2canvas, OrgChartJS, ProgressBar.js, HtmlAgilityPack, DocumentFormat.OpenXml, Financial-Formulas-Library-.NET-Standard, Microsoft.Ml.\*, Azure SDK for C#, Microsoft.Identity.\*, Microsoft.Kiota.\*, Microsoft Graph SDK, Radzen Blazor components, Microsoft.AspNetCore.SignalR.Client

- Working with link validation tools: LinkChecker
- Working with hand and power tools: Air gun (pneumatic), Barcode scanner, Brayer, Flexo plate brush, Crimper, Drill, File, Hammer, Ink scraper, Leaf blower, Measuring tape / ruler, Mitre saw, Orbital sander, Pliers, hand-held poly strapping tensioner, Portable data terminal / tablet, Rivet gun, Safety knife / Utility knife, Shears, Tape dispenser, Tie-down straps, Vinyl squeegee
- Working with network security tools: Nmap, Uncomplicated Firewall (UFW), Kibana, ClamAV, Linux Malware Detect, rkhunter
- Working with no/low-code tools: Microsoft Power Automate, Microsoft Power Apps +, Node-RED +
- Working with package management tools: npm, Composer, Webpack, NuGet, pip
- Working with packages (an R concept): mongolite, tidyverse, reshape2, plotly, ggrepel, waffle, R6, ggcorrplot, sqldf, colourvalues, car, devtools, sf, rnaturalearth, rnaturalearthhires, ggiraphExtra
- Working with runtime environments Node.js
- Working with screen sharing tools: scrcpy
- Working with server connection tools: PuTTY, FileZilla, MobaXterm
- Working with services for writing regular expressions: Regex101
- Working with services for generative AI: ChatGPT, Thetawise, GitHub Copilot
- Working with machinery: Bottle crushing machine, Drill press, Box strapping machine, Blind wrapping machine, Cardboard tube cutter, Fabric cutter, Flexographic printing press, Foot-operated poly strapping machine, Guillotine sheet metal cutter, Hole-punching machine (for Ziptrak channels), Ink dispenser (printing), Pallet wrapping machine, Polystyrene foam melting machine, Power pallet mover, Ride-on floor sweeper / vacuum cleaner, Upcut saw, Plate mounting machine (printing)
- Working with marketing tools: Google Marketing Platform (Google Analytics)
- Working with software development IDEs: CLion, IntelliJ Idea, PhpStorm, Visual Studio, Visual Studio Code, Qt Creator, Arduino IDE, PyCharm, RStudio, SciTE
- Working with version control tools: Git, Subversion
- Working with virus checking tools
- Working with web hosting tools: cPanel, Webuzo, Apache Web Server, Dovecot

#### **Arts/Humanities skills**

- Comprehension skills: Understanding English at a scholarly level
- Persuasion skills
- **Producing UX deliverables:** User research (e.g. Finding out about needs, goals, challenges, likes, dislikes, expectations, fears, beliefs, objections, buying habits, pain points, desired outcomes, and demographics of users), Experience maps, Use case diagrams, Wireframes, Task flows, User flows
- Working with cameras: Fuji X-series
- Working with color picking tools: JcPicker
- Working with graphic design tools: Adobe InDesign
- Working with ideation tools: Draw.io, XMind, Miro
- Working with image editing tools: Adobe Photoshop
- Working with video editing tools: Adobe Premiere Pro, multimedia conversion tools
- Working with UI/UX tools: Figma

### **Business skills**

- Brand consistency skills
- Creating and understanding business process documentation
- Decision making skills
- Leadership skills
- Managing others skills
- **Project management skills, utilizing project management methodologies:** Iterative & incremental approach (Agile), Structured approach (Prince2, PMBOK), Flow-based (Kanban)
- Project planning skills
- Producing project management deliverables: Feasibility studies, Stakeholder register, Value proposition canvas, Business
  model canvas, SWOT analysis, Project canvas, Work breakdown structure, Responsibility assignment matrix, RACI chart, Risk
  register, Cost Breakdown Structure, Resource Breakdown Structure, Kanban Board, Release schedule, Business case, Project
  charter, Product roadmap, Issue log, Dashboard, Root cause analysis, Vendor scorecard, Quality audit
- Writing business documents: Business plans, Business cases
- Working with accounting tools: QuickBooks
- Working with collaborating with others tools: Cisco Webex, Slack, Microsoft Outlook, Microsoft Teams
- Working with document management tools: Microsoft SharePoint, Microsoft OneDrive
- Working with knowledge base tools: DokuWiki
- Working with marketing tools: Buffer, Brevo, Google Business Profile
- Working with project management tools: Azure DevOps, Jira, ClickUp

# CROSS-DISCIPLINE SKILLS

- Active listening skills
- Attention to detail
- Communication skills
- Developing positive working relationship skills
- Maintaining a clean, safe, and tidy environment
- Meeting attainable KPI targets
- Meeting realistic customer expectations
- Performing time-sensitive tasks quickly
- Problem-solving skills
- Process improvement skills

- Quality control skills
- Research skills
- Self-management skills
- Spatial reasoning skills
- Stakeholder engagement skills
- Teamwork skills
- Training others skills
- Thinking skills: Abstract, Analytical, Creative, Critical, Design, Logical, Strategic, Systems