Matthew Bernardo
+1 (651) 431-1686
matthew.r.bernardo@gmail.com
matthewrbernardo.com

PERSONAL SUMMARY

I'm a quick learner with a broad set of skills in both Mechanical Engineering and Computer Science. I enjoy opportunities to creatively solve problems and challenge myself, and I put that energy into my work, taking the initiative to go above and beyond my job duties when I see a way to help. I enjoy teaching and working with children, which has given me strong communication skills. My hobbies include writing music, playing guitar, sports, video games, and designing hardware and software I'll probably never build.

EDUCATION

Graduated from the University of Minnesota in Fall 2016
Bachelor's in Mechanical Engineering with a focus on Control Theory, Fluid Power, and FEA
Minor in Computer Science with a focus on Algorithms, Artificial Intelligence, and Automata

SOFTWARE DEVELOPMENT SKILLS

Primary skills: Java, HTML, CSS, Javascript, Angularjs, Android, Android Wear
Secondary skills: C#, Xamarin, Salesforce, Lightning, Visualforce, Apex, MySQL, Android Instant Apps, Matlab

SOFT SKILLS

Strong communicator and presenter, punctual, works well in teams or individually, self-motivated, and proactive.

WORK EXPERIENCE

Software Engineer at Mindtree Ltd.   (December 2016-Present)
- Built an Android Wear proof of concept for a major airline
- Designed a Xamarin training program for internal use at Mindtree.
- Learned Xamarin as part of an experimental internal training program
- Was selected for a Live Project at Kalinga due to high performance, and helped build a Cafeteria Management Website using web development technologies, learning said technologies on the fly
- Graduated from the January 2017 Orchard Program at Mindtree Kalinga
- Skills from this job include: Ability to work in Agile teams, self-teach, proactively communicate, and design/implement projects from scratch

Teacher's Assistant at University of Minnesota College of Biological Sciences   (Fall 2016)
- Designed and created prototypes of low-cost electromechanical teaching aids.
- Created an Arduino-based game demonstrating biological feedback and nerves
- Worked in a team to create a modular system of interconnected devices to interactively demonstrate homeostasis
- Designed a unique 3D-printable pump to demonstrate how the heart works
- Skills from this job include: Collecting and using customer requirements, developing in a team, project planning, documentation, UX from a hardware perspective, dealing with budget constraints, and designing hardware to be assembled by the user.

TechTacToe EV3 Lego Mindstorms Camp Instructor   (Summer 2016)
- Taught groups of 6-12 year olds to build and program Lego robots
- Enhanced student by developing a better curriculum based around short-term rewards and gamification.
- New curriculum was approved for wider use, and job duties were expanded to include developing next year's curriculum
- Skills from this job include: Teaching, management, communication, taking initiative

IT Intern at American Society for Surgery of the Hand   (Summer 2015)
- Assisted head of IT with data entry and verification to facilitate the company's migration to Salesforce
- Created a script to automate data verification and completed job sooner than expected
- After finishing initial job requirements sooner than expected, duties were expanded
- Was offered freelance work after intership ended
- Skills from this job include: SQL basics, Salesforce basics, and creative problem solving

MOBILE DEVELOPMENT EXPERIENCE

Bidding Strategy Game
Created a turn-based strategy game with Xamarin Android, Xamarin Forms, PCL's, MVVM Architecture, Event Handlers, Observable Collections, and Data Binding.

Mobile Chat App
Created a mobile chat app in Xamarin using PCL's and a native Android layout implementing MvvmCross, Dependency Injection, Inversion of Control, and Cors Rest API consumption.

Shopping List App
Created an Android app demonstrating use of fragments, recyclerViews, custom adapters, gesture handling, bundles, and intents.

SALESFORCE EXPERIENCE

Currently have 25 Trailhead Badges and 38825 Trailhead Points
Currently learning Admin, Developer, Marketing Cloud, and Cloud Service.
Completed the Admin Beginner and Intermediate Trails, the Developer Beginner Trail
Completed 50% of the Developer Intermediate Trail, including the Lightning Component Module

SOME PERSONAL PROJECTS

matthewrbernardo.com
I made an online portfolio to practice using HTML, CSS, and javascript.
Low Server Storage Chat Service
I created a Web API in ASP.net designed for group messaging with as little storage space as possible. The server dynamically scales its memory usage as users connect and disconnect from the chat, and deletes messages from the server once every user has received them. I deployed this API to Azure with CORS enabled in order to consume its services from a mobile app.

Cornfield AI

While working in a cornfield, I became interested in how the brain automates actions over time. I began designing an artificial intelligence as a thought experiment. When classes resumed, I enrolled in an AI course despite my lack of prerequisites. In the class, I found that the AI I had designed with no prior knowledge of the field nearly exactly matched a classic reinforcement learning AI model. I was able to implement my design as a final project with only minor adjustments.

C++ Realtime Array Processing Engine
My first big programming project was a game that I built from scratch. I made a custom game engine in order to accommodate a unique crafting mechanic, which let players execute lines of code in a Turing-complete scripting language I developed for the game.

Here's a picture of Taco, my roommate's cat, as a show of appreciation for reading all this!