321-586-7798 akapar2016.github.io

Aviation

FAA CPL AMEL w/Instrument Complex, High Performance, Tailwheel

Hours: 425 PIC:325 XC:170 Night:66 Instrument:56 Rotor:52

Types: PA28, C172, PA44, J-3, DA42, PA16, PIAT, PIVE, G2CA

Skillset

Aircraft Systems, Development Assurance Processes, Human Factors, Avionics Certification

Engineering: Aviation Data Protocols, Atlassian(Jira, Confluence), Jama, Polarion, DOORS, SVN, GIT, Perforce, ALM Octane

Network Systems, Java, VB, C#, C++, JS, Python, SQL, WPF, Visual Studio, 3D CAD, Adobe Suite

Experience

Beta Technologies

Team Member - Systems Engineering

- Assist in integration testing and troubleshooting of G3000 PRIME avionics and power generation/distribution hardware
- Participate in CX300 system architecture and design development for low-voltage, high-voltage, avionics, flight-controls, and monitoring systems
- Contribute to low and high voltage system level certification plans for CX300

Garmin International - Aviation

Jul 2020 - Jan 2024

Feb 2024 - Present

Aviation Systems Engineer - Developer Assurance

- Program Coordinator and System Test Lead for "Flight Leading Edge" and "Leading Edge" responsible for internal bench and flight testing of integrated avionics systems
- Led G3000 PRIME first flight including flightworthy testing, installation, and test card preparation
- Managed internal flight test configuration and testing for human factors needs
- Project Lead for Simplified Vehicle Operations roadmap and vision definition tasks focused on validating high TRL level functions with certification barriers to determine path forward
- Systems representative for Weather Radar and multiple other product concepts
- Contribute to software development of systems testing tools and Garmin Network Capture Device

Avidyne Corporation

May 2019 - Jul 2020

Software Development Intern

- Developed test libraries for IFD lineup for DO-178 standards using VB6 with Perforce
- Created new software testing environment in .Net with VSTA integration using C#
- Developed and ran test scripts for IFD upcoming software updates

Dynon Avionics

May 2018 - Aug 2018

Software Development Intern

- Developed GUI application to stimulate EFIS data from Flight Simulator X/user in C# WPF
- Developed UI components of Electronic Flight Information System(EFIS) in C++
- Coordinated code with programming team with remote members following agile methodology

Florida Institute of Technology (FIT)

Aviation Specific Courses

Air Traffic Control Aviation Law Aviation Weather Aviation Safety
Human Factors Airline Operations Aircraft Operations Aviation Security

Aviation Research

- Co-authored "Prevalence of Invulnerability in Collegiate Part 141 Flight Students" paper. Presented at NTAS
- Gained knowledge in qualitative research methods and requirements

Education

Florida Institute of Technology (FIT)

May 2020

BS Aeronautical Science w/Flight, AA Flight Operations and Dispatch

Collegiate Part 141 Flight Training (Qualified for R-ATP 1000hr)

Minor in Computer Science and Unmanned Aerial System Applications

Personal Projects

The Kidney Action - Documentary

Co-produced, directed, and edited feature length documentary about kidney trafficking in Nepal and presented in multiple movie theatres in Nepal

Impact of Motivation on Development of Technology

Researching the impact of intrinsic motivation on development of technology focused on adaptation of the world wide web