Research Assistant, Micro and nanosystem Engineering Research Assistant, Micro and nanosystem Engineering Electrical Engineer (Masters) Ruston, LA Looking to obtain an entry-level electrical engineering position in a fast-paced industry to utilize my knowledge on microfabrication(cleanroom), device Physics Modeling, Characterization, TCAD Simulation and FPGA designing with VHDL simulation to perform my duties as assigned and to gain experience. Authorized to work in the US for any employer Work Experience Research Assistant, Micro and nanosystem Engineering Louisiana Tech University June 2017 to Present Thin Film Synthesis and Characterization: My graduate research was on synthesizing nanodiamond thin film in clean room environment as well as doing different characterizations (AFM, SEM, optical, electrical study) on the film and measuring thermal properties. We did lithography on nanodiamond film with conductive AFM on both contact mode and tapping mode cantilever tip to measure film thickness. Worked on device Fabrication to synthesis Graphene field effect transistor (GFET) and electrical characterization using four-point probe method. Image processing software was used to analyze the SEM and AFM images and to find particle and pore size distribution analysis. On-chip Voltage Regulation: Working on Power Management Integrated Circuit (PMIC) design projects mostly designing switched-capacitor (SC) based voltage regulator and Low drop out (LDO) regulator. Main research work is to identify the current design problem in sub-nano meter device and address them in the proposed design and develop a power management system having both SC regulator and LDO in 45nm technology from RTL to layout using Cadence Virtuoso and H-spice. Infrastructure Associate Engineer Accenture - Dhaka, BD April 2015 to April 2017 Designing network infrastructure with redundancy and failover backup, Managing Cisco switches and routers & Configuring them in Data center environment Deploying VM on VMware environment, maintaining the physical servers of the VMs (both windows and linux platform), troubleshooting, networking - Monitor performance, and operating environment fault to ensure immediate support and vendor escalation - Ensure performance and high availability for major applications and services to minimize downtime and continuous support for H/W and operating system Network Security Administrator Confidence Group - Dhaka, BD October 2014 to April 2015 - Designing network

infrastructure with redundancy and failover backup, Managing Cisco switches and routers & Configuring them. - Managing Cisco wireless controllers and wireless routers. Configuring Active Directory for windows server 2012 R2. Configuring E-mail Client. Configuring Virtual machine using VMware Workstation 9. Academic Based Projects: Education Master's in Electrical Engineering Louisiana Tech University - Ruston, LA June 2017 to Present Bachelor's in Electrical Engineering Military Institute of Science and Technology - Dhaka January 2010 to December 2013 Skills Thin Film Assembly (2 years), Matlab, Autocad (Less than 1 year), orcad cadence (1 year), Scanning Electron Microscopy (SEM) (2 years), orcad Virtuoso, Atomic Force Microscopy (AFM) (2 years), VHDL, Verilog, Python, LTspice, Microwind, TCAD, Medici, Assembly Language, CCNA, DNS, Switching, routing, troubleshooting, Labview, Word, PLC, PCB Links http://linkedin.com/in/naim-patoary-a13937b4

https://scholar.google.com/citations?user=VFKN_vwAAAAJ&hl=en Certifications/Licenses Clean room safety certified in IFM (Institute for Micro-manufacturing) Present Groups Venture Crew Present Bridges International Present Publications - Daniel, F., Patoary, N.H., Moore, A.L., Weiss, L. and Radadia, A.D., 2018. Temperature-dependent electrical resistance of conductive polylactic acid filament for fused deposition modeling. The International Journal of Advanced Manufacturing Technology, 99(5-8), pp.1215-1224 https://link.springer.com/article/10.1007/s00170-018-2490-z 2018-11 - Financial Feasibility Analysis of a Microcontroller Based Solar Powered Rickshaw, - published at Electrical Information and Communication Technology (EICT), 2013 International Conference, Dhaka .13-15 Feb. 2014. https://www.researchgate.net/publication/264934121_Financial_feasibility_analysis_of_a_micro-controller_based_solar_powered_rickshaw 2014-02 Additional Information Acedemic Based Project Graduate Thesis/ Practicum: June 2017 Present - Nanodiamond Covalent Assembly (Nanometer thick film assembly in Cleanroom of 100 particle per cubic feet) - Diamond thin film deposition using covalent assembly - Film characterization (Electrical characterization using four-point probe scheme, surface morphology using SEM, AFM, film thickness measurement and thermal properties) Digital Design and Communication: Apr 2019 - Designed Latch, flipflop, stop watch with Verilog

Code in Vivao using FPGA  Advance Microelectronic Device:  Feb 2018  - Used Athena semiconductor process simulator to study the epitaxial growth process and the thermal dopant diffusion in Si wafer in TCAD  Silicon n-channel MOSFET device fabrication TCAD simulation: Jan 2018  - Device fabrication process simulation: Silicon n-channel MOSFET (p-type body, 100 nm gate-length) using TCAD  - By changing the thickness of the epitaxial layer in NMOS, we modeled a theoretical profile between the impurity concentration and threshold voltage. For the thickness between 40 nm ~ 60 nm, we obtained stable threshold voltage values, less independent on impurity concentration

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