PRABIR **PRADHAN**

1115 8th Avenue, Box 4136, Grinnell, IA 50112 • 914.400.8520
pradhanp@grinnell.edu • github/LinkedIn: prabirmsp

Education

Grinnell College
Expected May 2018
Bachelor of Arts, Computer Science/Mathematics
GPA: 3.81 - Dean's List
- Selected Courses: Artificial Intelligence, Analysis of Algorithms, Combinatorics, Abstract Algebra
- Winner of 2016 Pioneer Weekend 2.0 Innovation Competition

Related Experience

Android Project Lead Developer   **December 2014 - Present**
Grinnell AppDev, Grinnell, IA
A team of developers who maintain six Android apps with over 1,000 daily community users
- Created a Publications app for the college newspaper that has over 200 active readers
- Engineered a fully featured app to stream the college radio station, with 250+ listeners
- Corresponded with a team of designers and developers for other platforms
- Focused on back-end development, efficient data storage and parsing, and user experience

Mobile Software Development Engineering Intern   **May - July 2015**
Smart Solutions, Kathmandu Nepal
A software development firm providing web and mobile solutions for international banks, enterprises, and NGOs
- Designed and implemented a media browsing app for UK based NGO Practical Action to save publications, videos, and audios, to be accessible without connectivity
- Created a PHP back-end to push content from a server database to the app with a user login token
  - Stored media and content locally on device and added 'favorite' and preview functionalities
  - Supported over 15 languages, including right-to-left languages, and handled media viewing inside app
  - Engaged with software development in an international scale, collaborated with teams in Hong Kong and US

IT Services Technology Consultant   **January 2015 - Present**
Information Technology Services, Grinnell, IA
- Troubleshot hardware and software issues for students, faculty, and staff across campus
- Provided support for Linux, Windows, OS X, Android, and iOS for 1600 students and staff

Research

Proof Assistants and Pedagogy Project   **May 2016 - Present**
Grinnell College, Grinnell, IA
- Worked with Prof. Peter-Michael Osera to build a proof assistant aimed at teaching undergrads to prove program correctness, while giving rich tailored feedback to guide students
  - Created to be used in introductory CS and discrete mathematics courses in Grinnell and Haverford
  - Utilized the Z3 Theorem Prover and Haskell to write a parser for Java and Python, a language for expressing proofs, and interpreters for the proof language
- Designed a web interface to interact with the proof assistant, and planned to present at a PL conference
- Began the process of co-authoring a paper to present the proof assistant

Leadership Experience

AV Center Student Coordinator   **October 2015 - Present**
Grinnell College, Grinnell, IA
- Oversaw AV Center operations and supervise a team of student employees
- Trained a new team of student employees and administer certification exams every semester
- Moderated conflicts issues between employees and patrons
- Coordinated AV for Alumni Reunion where over 1200 alumni attend over 100 events over a weekend

Projects
avaliable on github

Location Tracking: App to gather location data and call detail records from villagers in rural Nepal for research on selective migration and demographic consequences of climate-related disasters at University of Washington

Product Tracker: Web and mobile app with a PHP back-end to track daily product sales and provide tailored visual feedback to both producers and clients using a login scheme

Mushroom DTree: A decision-tree algorithm to classify whether a mushroom is edible based on its attributes

HMM: Restore up to 70% of corrupt files using simple Hidden Markov Models and English language models

Android Visualizer: Standalone audio visualizer to go along with the streaming app for the college's radio station

Skills & Interests

Programming Proficiency: Java • Haskell • C • Scheme • Android Development
Other Computing: Git • Unix/Linux • LaTeX • Adobe Creative Suite • PHP • SQL • JavaScript
Languages: Nepali (native) • Hindi (conversational) • French (beginner)
Other Interests: Graphic Design • Photography • Hiking • Mountain Biking • Jazz Trumpet   Updated 8 July, 2016