Patrick Clarke

Skills

Design
Data Visualization
User Interface Design
User Testing
Prototyping
Design Methodologies

Development
Web Development
Android Development
Agile Development

Communication
Public speaking
Technical Writing

Software
Adobe Design Suite
Balsamiq
Axure
Oxygen XML Writer

Adept designer with a solid backing in coding and understanding user needs. Focused towards crafting elegant UX/UI and information design in software development. Broad skillset can fill many roles, and opens fresh perspectives when cracking wicked problems. Especially talented at communication, whether writing, presenting, or working among varied specialists.

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Front-end Development
Technical Writer/Developer, FINCAD ↔ May 2013 – May 2015

Responsibilities

Wrote guide and code samples for SDK product in supported languages
Redesigned front-end of documentation, delivered as local HTML pages
Updated DTD and Python build scripts for XML documentation files
Designed and implemented CMS in Bootstrap for a Django-based app
Set up new documentation system using Grunt and Pandoc
Authored finance fundamentals guide for novices to product and finance

Results

Increased readership of user guides among internal staff and clients
Significantly reduced need for training and support calls
Freed up developers and quantitative analysts to focus on key tasks

Technologies used
XML & DTD
HTML/CSS
jQuery (JavaScript)
Twitter Bootstrap
Java
C#
C++
Python
Grunt

Data Visualization Design
Visual Analytics Research Assistant, SFU CZLab ↔ May 2014 – May 2015

Responsibilities

Sketched arthritis health and fitness data visualization concepts
Performed data analysis on Fitbit data using the pandas Python library
Designed static and click-through prototypes in Illustrator and Axure
Wrote functional prototypes in Processing, JavaFX, and d3.js
Gathered requirements from collaborating arthritis research group

Results

Created algorithm for parsing raw data into useful information
Prototypes critical to successfully winning grant funding
Initial user test of design indicated it was easily understandable

Technologies used
Adobe Illustrator
Axure
Fitbit API (REST)
Processing (Java)
JavaFX (Java)
HTML/CSS
D3.js (JavaScript)
pandas (Python)

Work History

Technical Writer/Developer, 2013–15
FINCAD

Visual Analytics Research Assistant, 2014–15
SFU CZLab

UX Designer, 2012
BCcampus

Content Intern, 2011
BroadbandTV

Shipping Clerk, 2008
Aviall

Grocery Assistant, 2004–07
Real Canadian Superstore

Web Design
UX Designer, BCcampus ↔ May – December 2012

Responsibilities

Designed interactions in wireframes and built click-through prototype
Implemented HTML, CSS, and JavaScript to match designs at the pixel
Researched, designed, and conducted user test with 8 participants
Performed heuristic evaluations and designed personas
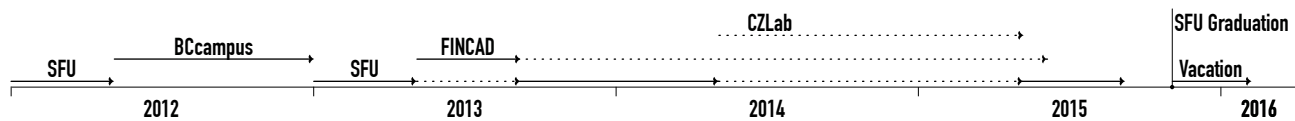Wrote report summarizing user test findings in Adobe InDesign

Results

Upgraded ApplyBC launched to thousands of users flawlessly
Success of upgrade persuaded other institutions to follow suit
User test report used as roadmap for next set of upgrades

Technologies used
Balsamiq Mockups
Adobe InDesign
HTML/CSS
GWT (Java)
Selenium
JavaScript

Timeline

CZLab

SFU Graduation

BCcampus   FINCAD

SFU   SFU   Vacation

2012   2013   2014   2015   2016

Education

BSc School of Interactive Arts
& Technology, 2015
  Simon Fraser University

BA Economics, 2010
  Simon Fraser University

Interactive Object Design
Sunset Sails, Speculative design course ↝ Spring 2014

Responsibilities
  Collaborated with city staff to design public installation of energy data
  Accessed natural gas API and connected data to Arduino board
  Constructed, wired, and coded physical prototypes that visualized data

Results
  Presentation skills persuaded city staff that project design was feasible
  Physical prototype connected to live building data via API at showcase

Technologies used
  Adobe Illustrator
  InDesign
  Photoshop
  Arduino (C)
  Processing (Java)

Hexboards, Interaction design methods course ↝ Spring 2012

Responsibilities
  Learned about clients' needs, performing cultural probes and interviews
  Created posters to communicate research findings with clients & class
  Organized workshops to refine design using clients' input on prototypes

Results
  Clients found design useful, improving group communication
  Lecturer described design as highly creative, appropriate for clients

Technologies used
  Adobe Illustrator
  InDesign
  SketchUp

Android Development
Benefit, Mobile app design course ↝ Fall 2013

Responsibilities
  Designed interface through iterating wireframes and prototypes
  Implemented design in Java, and tested to support Android 2.3 and up
  Wrote methods to authenticate with OAuth 1.0a on Android

Technologies used
  Android SDK
  Fitbit API (REST)
  Java

Volunteer History

Toastmasters, 2008–12

Rona MS Bike Tour, 2011

Canadian Liver Foundation,
2011

SFU Leadership Summit, 2011

SFU Residence Training, 2010

Economics Student Society,
2008–10

Results
  Functional prototype worked perfectly with user data
  App design called highly intuitive and simple to use

Public Speaking & Leadership
Club President, Burnaby Mountain Toastmasters ↝ April 2009 – June 2010

Responsibilities
  Organized and motivated executive team to facilitate club meetings
  Mentored and assisted members' growth as public speakers
  Created events to challenge members' skills and welcome new members
  Promoted club on campus through advertising and publicity campaigns

Results
  Grew membership from 10 to 30 people
  Went from no members with certificates, to nearly 10